ST/ESA/SER.R/20

NATIONAL EXPERIENCE IN THE FORMULATION AND IMPLEMENTATION OF POPULATION POLICY, 1960-1976

PERU

UNITED NATIONS

ST/ESA/SER.R/20

Department of Economic and Social Affairs

NATIONAL EXPERIENCE IN THE FORMULATION AND IMPLEMENTATION OF POPULATION POLICY, 1960-1976

PERU

UNITED NATIONS
New York, 1978

NOTE

Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

ST/ESA/SER.R/20

PREFACE

Since the World Population Conference was held under the auspices of the United Nations in 1974 there has been growing interest among policy makers in the complex interrelations between population and development, with population policy being an area of increasing concern.

The following study is one of a series of reports prepared during 1975 and 1976 by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, in an attempt to disseminate information among interested Governments and scholars on the experience of various Governments in formulating and implementing population policies. The series, when completed, is intended to include all countries in the world and examine the variety of situations and solutions adopted by Governments, which have often been determined by particular historical, political, socio-economic or cultural circumstances. The information included in the series would be useful to the national bodies assisting Governments in the area of population and related fields, as well as to the international organizations that are attempting to increase knowledge of the ways in which Governments may most effectively resolve problems associated with population.

Although the reports have been prepared with all possible care, there may possibly be errors or omissions. Comments or corrections from Governments would be appreciated.

CONTENTS

	Page
PREFACE	iii
INTRODUCTORY NOTE	1
I. THE PERIOD 1960-1968	2
The political and economic situation	2
Development planning	3
Information on the general demographic situation and trends	4
General policy with regard to the demographic situation and trends	4
Size and growth of the population	5
Morbidity and mortality	6
Fertility	9
Immigration	10
Emigration	10
Spatial distribution	10
II. THE PERIOD 1968-1976	13
The political and economic situation	13
Development planning	14
Information on the general demographic situation and trends	15
General policy with regard to the demographic situation and trends	16
Size and growth of the population	18
Morbidity and mortality	23
Fertility	28
Immigration	32
Emigration	32
Spatial distribution	32
CONCLUSION	44
Table. Selected demographic indicators, 1950-2000	49
Map. Peru: administrative divisions	52

INTRODUCTORY NOTE

The evolution of Peru's demographic trends and structures during the past three decades has been similar to that of a number of countries in the Latin American region. A substantial and continuing decline in mortality beginning during the 1940s and continuing high fertility brought about rapid and accelerating rates of population growth: from 1.8 per cent per annum during the period 1900-1940 to 2.2 per cent during 1940-1961, and to 2.9 per cent during the period 1960-1972. Whereas the average annual rate of growth was lower in Peru than in the region as a whole during 1940-1961 (2.2 per cent as compared to 2.5 per cent for the region), the rate was higher than the regional average during the subsequent period (2.9 per cent as compared to 2.8 per cent for the region).

But perhaps the most salient aspect of Peru's recent demographic history has been that of massive internal migration which, over the period of a century, resulted in a major redistribution of population within the national territory. Whereas the country's total population quadrupled in the century from 1862 to 1961, the population of the coastal region increased eight times, and that of the selva six, while the population of the sierra--the geographical region in which the country's population had been concentrated for centuries--barely trebled. This pattern did not reflect significant differences in natural increase between the three major geographical regions but rather resulted from major population shifts. In addition, Peru was transformed from a predominantly rural country to one that was predominantly urban, as a result of an intensive process of urbanization. Whereas the country's urban centres (cities with over 2,000 inhabitants) included 26.9 per cent of the total population in 1940, they included 40.1 per cent in 1961 and 53.0 per cent in 1972.

Concern over demographic problems may be traced back to the early 1940s when Dr. Arca-Parra, the founder of Peruvian demography and director of the 1940 Census, identified serious problems in relation to accelerating rates of population growth and to massive internal migration. However, national concern over various social and economic issues took precedence over population problems during the 1950s. Although Peru had been among those countries that had supported the concept of conducting decennial rounds of censuses in the Americas, it did not conduct a census in 1950, largely as a result of a change in government which occurred some months before the census was to have been conducted.

I. THE PERIOD 1960-1968

The political and economic situation

Former President Manuel Prado (1939-1945) served a second term as President of Peru from 1956-1962. The election of Victor Raúl Haya de la Torre, founder of Alianza Popular Revolucionario Americano (APRA), in June 1962 was overridden by a military coup, and a new election was called for June 1963, in which Fernando Belaúnde Terry was elected.

During the years 1950-1960 the Peruvian economy was characterized by an outward-oriented development strategy, facilitated by the diversification of exportable agricultural and mineral primary products. The driving force of economic growth was the external sector, which displayed a good deal of dynamism, with a volume in 1960 four times greater than in 1950. Although this pattern of development was successful in the 1950s, when the growth rate was approximately 5.2 per cent per annum, the following decade saw symptoms of exhaustion in the pattern and the growth rate was less rapid, falling to 4.8 per cent. During the 1960s growth was due mainly to favourable terms of trade, implying greater vulnerability of the external sector. A large part of production and commerce was controlled by foreign enterprise, which played a decisive role in finance and in the general economic orientation of the country. Furthermore, the lack of controls permitted a large part of total export income in private hands to be used for the importation of luxury goods. For related reasons, the development of national industry was largely dependent upon imported goods. 1/

During this period, the State concerned itself generally with maintaining the established order, intervening only marginally in the economic process. Income and property taxes decreased absolutely in some years because of widespread evasion. Taxation was not directed towards correcting the unjust structure of income and property. The economic imbalance between the economically weak majority and the small sector of society that controlled the economy was due not only to the inadequate intervention of the State but also to the growth of the economically active population at a rate of 3.3 per cent per annum. With the recession which followed the devaluation of the sol in 1967, unemployment and underemployment reached 29 per cent in the Lima-Callao region and 48 per cent in the Arequipa region.

1/ "Informe sobre la experiencia nacional adquirida al introducir modificaciones sociales y económicos de gran alcance para fines de progreso social" (E/CN.5/478/Add.1).

Development planning

Comprehensive planning began in 1961 with the creation of the Central Office of Studies and Programmes (Oficina Central de Estudios y Programas) within the Ministry of the Treasury. It was the Central Reserve Bank, however, in accordance with the recommendations of the Punta del Este Charter, that drafted the country's first 10-year development plan in 1961. A national planning system was also established by the Government in 1961. Following a restructuring in 1967, it consisted of the National Council for Economic and Social Development (Consejo Nacional de Desarrollo Económico y Social) as the highest planning institution, the National Planning Institute (Instituto Nacional de Planificación/INP), which served as the technical agency of the National Council and the Advisory Planning Council (Consejo Consultivo de Planificación), which involved the private sector in the planning process.

Sectoral planning agencies were located within the Ministries of Labour and Indigenous Affairs, Public Education, Development and Public Works, Public Health and Social Welfare, and Agriculture, as well as within the National Town Planning Office and the National Economic Development Fund.

The Economic Commission for Latin America (ECLA) reported in 1967 that a number of regional planning offices were envisaged. Regional development corporations had been established in Cuzco, Arequipa, Madre de Diós, Tacna, Puno and Ica, largely in response to natural disasters which had occurred during the 1950s and 1960s.

Development plans issued between 1961 and 1968 consisted of the plan drafted by the Central Reserve Bank for 1962-1971, 2/ public investment programmes for the years 1964, 1965, and 1966, a comprehensive development plan for the period 1967-1970, 3/ and a long-term development strategy drafted in 1968. 4/

2/ Plan Nacional de Desarrollo Económico y Social del Perú, 1962-1971 (Lima, Banco Central de Reserva del Perú, 1962).

3/ Plan de Desarrollo Económico y Social, 1967-1970 (Lima, Instituto Nacional de Planificación, 1967).

4/ Estrategia del Desarrollo Nacional a Largo Plazo (Lima, Presidencia de la República, Consejo Nacional de Desarrollo Económico y Social, 1968).

Information on the general demographic situation and trends

The Unit for Demographic Analysis (Unidad de Análisis Demográfico), of the National Statistical Office (Oficina Nacional de Estadística y Censos/ONEC), which publishes the monthly Boletín de Análisis Demográfico, was established by the Government in 1964. A semi-autonomous institute, the Population and Development Studies Centre (Centro de Estudios de Población y Desarrollo), was also established in the same year.

A census was conducted in 1961, with previous major censuses having been conducted in 1876 and in 1940. Beginning in the 1960s the Division of Biostatistics of the Ministry of Public Health and Social Welfare began the task of improving the completeness of birth and death registration, acknowledging that such information was the basis for the planning and evaluation of programmes of public health.

At the Second Inter-American Seminar on Civil Registration, held in 1964, it was reported that "certain serious defects in /Peru's/ registration system have been evident for a number of years. These defects affect considerably the reliability of the tabulated and published statistics. Already mentioned is the lack of centralized supervision over the whole system by a national civil registration office and the improper recording of foetal deaths as births and deaths. Other defects include lack of compulsory registration, causing in some small districts up to 70 per cent omission, transcription errors, poor reporting on cause of death by physicians, the comparatively short length of time (8 days) allowed for registering births, especially in backward areas, lack of knowledge about legal requirements of registration, both on the part of the public and the registrars of smaller vital registration offices, the lack of funds and necessary equipment for registrars, /and/ the lack of a strict legal provision for appointing municipal agents encharged with registration in populous places which are distant from the principle vital registration office." 5/

General policy with regard to the demographic situation and trends

The Government did not have an explicit population policy during this period. Even the creation of the Population and Development Studies Centre was not followed by a policy statement, although the Government did display an interest in the results of studies conducted by the Centre.

5/ "Second Inter-American Seminar on Civil Registration" (ST/ECLA/CONF.19/L.4).

Size and growth of the population

Information available to the Government

In its reply to the Second United Nations Inquiry, the Government reported that, based on provisional data from the 1972 Census, the total population, without considering the Census undercount or the inaccessible population of the selva, was 13,572,052 inhabitants. Considering that the population of 1961, enumerated under the same conditions, was 9,906,746, the average annual rate of growth during the intercensal period was on the order of 2.9 per cent. Total population size in 1976 was estimated at 16,090,000 inhabitants.

The Government reported in 1976 that the high rate of demographic growth was responsible for the fact that the age pyramid of the Peruvian population had a wide base. Peruvians under 15 years of age make up 45.0 per cent of the population. Persons of working age (15-64) constitute 52.0 per cent of the total population and persons over 65, 3.0 per cent. The dependency ratio is consequently very high--82.0 per cent. 12/

In its policy statement issued in 1976 the Government reported that the real per capita product had doubled between 1950 and 1965, but whereas it had grown at an average annual rate of 3.6 per cent during the first half of the period (1950-1962), it had slowed to an average annual rate of 2.4 per cent during 1963-1975. The Government noted that in order to obtain a more precise picture of socio-economic realities, the economically active population had to be divided into three sectors: rural, traditional-urban and modern-urban. Whereas economic activity in the rural sector had grown at an average annual rate of 2.4 per cent, a fairly low rate in relation to national demographic growth rates, the traditional-urban sector had grown at 4.6 per cent and the modern sector at 6.6 per cent. The Government noted, however, that the respective populations of these sectors had grown at 0.8, 4.5 and 4.2 per cent per annum, so that the growth of the per capita product by sector was approximately 1.6, 0.1, and 2.5 per cent respectively, between 1950 and 1975. 13/

The Statistical Office reported in 1974 that population projections indicated that the country would continue to experience rapid demographic growth, although the rate would decelerate slowly as a result of a moderate decline in the birth rate, maintaining an age profile by the year 2000 which was still that of a youthful population. Three hypotheses were formulated with regard to future trends:

12/ Ibid., p. 9.

13/ Ibid., pp. 12-13.

Size and growth of the population

Information available to the Government

The National Statistical Office reported in 1961 that a sample survey conducted during the year had enumerated a total population of 9,747,000 inhabitants, whereas preliminary results of the 1961 Census gave the total population as 10,364,620. The discrepancy was explained by an overcount in a number of districts of metropolitan Lima. 6/

Projections of the population by sex and five-year age groups were published by the Statistical Office in 1964. 7/ The long-term development strategy, drafted in 1968, predicted that in the coming decades the country would double its population, arriving at 25 million inhabitants by the year 1990.

Government perception of size and growth in relation to development objectives

At the first Seminar on Population and Development, organized by the Population and Development Studies Centre in 1965, President Belaúnde Terry stated: "The demographic explosion is a fact; it is an ascending curve that can be drawn from past times, accentuated by an increase in the birth rate and a decline in the mortality rate due to progress in medical science...Our attitude should be a constructive one. We should incorporate those regions of the country apt to reduce our food intake deficit and offer horizons to our increasing population. The country could orient the excess population to those areas where they could develop their own economic support". 8/ Basically, the Government considered that the opening of the high jungle--long considered an area of great potential for reducing the scarcity of arable land and for increasing productivity and employment--provided a solution to development problems related to demographic growth. As President Belaúnde remarked, "The total potential of the Marginal Forest Highway zone of influence is far greater than that of the whole coast put together, and it can be developed in a much shorter time. Peru needs tillable land now to meet the pressing problems of malnutrition and population growth, and the /Marginal Forest Highway/ is the only solution... Peru's seedbed of men should orient its surplus labour

---

6/ Sexto Censo Nacional de Población. Principales Resultados Obtenidos por Muestro (Lima, Instituto Nacional de Planificación, Dirección Nacional de Estadística y Censos, 1961), p. iii.

7/ Oficina Nacional de Estadística y Censos, Boletín de Análisis Demográfico, No. 1 (1964).

8/ José Donayre, Country Profiles: Peru (New York, Population Council, 1973), p. 6.

the first assumed a total population of 40.01 million inhabitants in the year 2000 and a population growth rate of 3.3 per cent; the second assumed a total population size of 33.49 million and a growth rate of 2.8 per cent, while the third assumed a total population size of 31.73 million and a growth rate of 2.3 per cent. Projections based upon the second hypothesis were considered to be the most plausible and had been officially adopted. 14/

Government perception of size and growth in relation to development objectives

At the World Population Conference in 1974 there was much discussion of excessive population growth and scarcity of resources. The Peruvian delegation pointed out that it was not the high population growth rates of the developing countries which posed a threat to world resources but rather the practices of the developed countries. A change in the world economic structure was needed, in order to place developing countries in a better bargaining position. The delegation emphasized that the so-called population problem was part of an older problem--that of social injustice, and rejected population control as a solution, considering it in conflict with the country's cultural values.

The Peruvian delegation repeated the main points of the above statement at the Second Latin American Meeting on Population in 1975. At other recent international meetings on the subject, the Government has maintained that population growth contributes positively to development objectives--or, rather, that in development planning, the need for structural transformation should be emphasized, not population growth rates.

While the Government continues to maintain that problems related to population growth would be greatly alleviated by the establishment of norms of greater social justice, it has recently modified several of the views expressed in previous statements and has identified a number of ways in which population growth is constraining economic and social development. For example, the Government was formerly somewhat more optimistic on the issue of its land resources. At the Second Latin American Meeting on Population, the Peruvian delegation had stressed the enormous potential of the country's natural resources, such as the petroleum discovered in the Amazon jungle. The Statistical Office had reported similarly in 1974 that the natural resources within the national territory, including varied soil and climates which permitted a variety of products to be cultivated throughout

---

14/ La Población del Perú, p. 166.

towards the jungle...The exploitable lands made available by the Marginal Forest Highway will require some half a million farmers and families, thereby alleviating demographic tensions in other regions. 9/

The long-term strategy, drafted in the final months of the Belaúnde administration and adopted by the subsequent military Government, reported that although the country had exhibited growth in the domestic product, this did not necessarily signify satisfactory development nor did the type of growth, with a typically urban profile, generate modernization in the agricultural sector. Reporting that the total population would double by around 1990, the Planning Institute (INP) emphasized the enormous implications this would have for the economic and social process and the urgency of having a solid base on which to bring about socio-economic change.

Policy with regard to size and growth

Concern with rapid population growth dated from around 1964, when the results of the 1961 Census became known and the Government was preparing its development plan for the period 1967-1970. In mid 1968 an agreement was signed with the Pan American Health Organization (PAHO) to implement a maternal-child health programme which would include family planning. Before the programme was begun, however, the new Government assumed power and the proposed project was suspended.

The main development thrust during the Belaúnde administration was to open the high jungle to intensive settlement. As the President stated: "The conquest of the montaña, a visionary dream in the past, is now to become a concrete reality. Conservative economic estimates based on physical and social facts eloquently demonstrate that it is feasible and practical. Population pressures make it imperative for us to develop one of the richest natural resources we have." 10/

Morbidity and mortality

Information available to the Government

Beginning in the early 1960s the Division of Biostatistics of the Ministry of Public Health began the task of improving the completeness of the registration of deaths and achieved the following result: whereas data had been available from 163 districts for total deaths and from

---

9/ Fernando Belaúnde Terry, Peru's Own Conquest (Lima, American Studies Press, 1965), pp. 177, 169.

10/ Ibid., p. 167.

100 districts for infant deaths in 1963, by 1965 they were available from 204 districts for total deaths and from 186 districts for infant deaths.

A number of nutrition surveys were conducted during the 1960s, particularly among pre-school children. They revealed high percentages of moderate and severe malnutrition among the rural population of the sierra and among the urban population of the selva.

The Government reported that general mortality had declined from 28 to 18 per thousand population during 1950-1964 and that the level of life expectancy had risen from 45.6 to 53.5 years during that same period. In projections published by the Statistical Office in 1964 (for the period 1960-1980) it was assumed that the level of life expectancy at birth would increase by 5.2 years in the first decade and by 6.8 in the second, attaining a level of 65.0 years by 1975-1980.

Government perception of levels of morbidity and mortality

In its development plan for the period 1967-1970 the Government reported that the level of health in the country was greatly affected by a number of factors: low levels of nutrition; poor environmental sanitation; and cultural patterns that prevented the adoption of modern sanitary practices. The plan noted the poor health coverage of the rural population, estimating that some 3,500,000 rural inhabitants had virtually no access to health-care services. It reported, however, that given the downward trend in general mortality during the period 1950-1964 (from 28 to 18 per thousand population), it might be feasible to significantly improve the health status of the Peruvian population within the context of the then-existing development strategy.

Policy with regard to morbidity and mortality

In the decennial plan for 1962-1971 the Government reported that the major goals of the nation's public health activities would be the development of local health services, the eradication of malaria, environmental sanitation, the training of personnel, the improvement of the National Health and Nutrition Institute, the control of tuberculosis, and the extension and improvement of the Institute of Occupational Health.

The plan reported that the National Malaria Eradication Service had fulfilled the provisions of its current programme, with assistance from the World Health Organization (WHO) and the United Nations

Children's Fund (UNICEF). A fourth and final coverage of the coastal valleys had been completed, a third coverage of the selva was under way and a majority of malarial areas had entered the maintenance stage. A plan for the control of tuberculosis was also being implemented, with a $3 million loan from the United States Agency for International Development (USAID).

An environmental plan for the north and north-east was designed to provide potable water and drainage facilities to more than 100 cities and towns in nine departments. In addition, a programme of basic rural sanitation was to be conducted in settlements of fewer than 2,000 inhabitants, as well as exploratory studies leading to the provision of safe drinking water and sewage disposal facilities in 247 rural localities, encompassing some half a million inhabitants.

With regard to the development of the country's health infrastructure, the development plan for 1967-1970 reported that nine hospitals, with a total of 1,496 beds, had recently been constructed and that 12 regional hospitals, with a total of 1,700 beds, as well as four medical posts and 15 sanitary posts, were under construction.

Projects related to nutrition received particular government attention. A project undertaken by the Government in co-operation with UNICEF in 1961 sought to improve the level of nutrition in the areas of the Andean Indian Programme. Over a three-year period the project sponsored training courses in nutrition and home economics for some 360 community leaders. During the late 1960s the Government extended the applied nutrition programme to 265 primary schools which served as focal points of programme activities aimed at penetrating entire communities. 11/

There were a number of geographical constraints preventing the establishment of an integrated health infrastructure. Beginning in the 1950s the Government, in co-operation with UNICEF, began a programme for the development of health services in 25 settlements located throughout the Amazonian jungle. UNICEF reported in 1965 that "although the programme continues to go forward, neither the results obtained nor the existing resources are commensurate with the scale of the problems described". 12/

During the late 1960s the Government attempted to develop basic health services, especially for mothers and children, in the health regions of Loreto and San Martín, where large distances separated the

---

11/ "Recommendation of the Executive Director for an allocation: Peru: applied nutrition" (E/ICEF/P/L.1090), para. 5.

12/ "Recommendation of the Executive Director for an allocation: health services: MCH and environmental sanitation" (E/ICEF/P/L.618/Rev.1), para. 4.

major health units. To facilitate prompt consultations, a radio communications system was installed in 1965. 13/

Fertility

Information available to the Government

Beginning in the early 1960s the Division of Biostatistics of the Ministry of Public Health attempted to improve the completeness of the registration of births and achieved the following result: whereas reliable data had been available for 106 districts in 1961, by 1965 they were available for 231 districts.

A number of fertility surveys were conducted during the 1960s by various government agencies. A survey of El Agustino, a low-income district of Lima-Callao, was conducted by the Statistical Office in 1967 and a survey of Cerro de Pasco was conducted by the Centre for Social Research of the Ministry of Labour in the same year. In addition, a number of non-official studies were conducted which were available for government consultation.

In 1967 a conference was convened under the auspices of UNICEF and the Peruvian Government on "The family, childhood and youth in national development", with major emphasis placed on individual rather than aggregate levels of national fertility. 14/ It was attended by delegates from the National Planning Institute and a number of government ministries.

Government perception of levels and trends of fertility

Governmental concern over rapid population growth dated from around 1964, when the results of the 1961 Census became known. The Belaúnde Government acknowledged that birth rates were high and approved the inclusion of family planning within maternal and child health programmes. However, the Government considered that a more appropriate distribution of the population, involving the settlement of underpopulated areas, would compensate for problems to which high fertility levels might contribute.

In projections published by the Statistical Office in 1964, two fertility hypotheses were assumed for the period 1960-1980: that of constant fertility, with the gross reproduction rate (GRR) equivalent

---

13/ "Recommendation of the Executive Director for an allocation: Peru: health services" (E/ICEF/P/L.1096), para. 5.

14/ La Familia, La Infancia y la Juventud en el Desarrollo, Informe Final de la Conferencia celebrada en Lima, Peru del 14 al 20 de mayo de 1967 (Lima, Rauago e Hijos, 1967), pp. 345-347.

to 3.11; and that of a uniform decline, with the GRR declining from 3.11 in 1960-1965 to 2.59 in 1975-1980. 15/

Policy with regard to fertility

In mid 1968 an agreement was signed by the Government and PAHO to establish a national maternal and child health programme that would include family planning. However, the military Government assumed power before the programme could be implemented, and all preparations were halted.

Immigration

An office for the co-ordination of migration policy had been established in 1946 within the Ministry of Foreign Affairs, and commissions had been sent to various European countries during the late 1940s to open negotiations concerning the selection of migrants for land settlement. 16/ The number of immigrants who entered the country during the 1960s, however, was not demographically significant.

Emigration

Emigration was not demographically significant during the period in question. No government perception or policy is known.

Spatial distribution

Information available to the Government

In 1962 a symposium on "Migration and integration in Peru" was convened, which focused on such topics as nomadic movements of the indigenous population. It was addressed by the Minister of Labour and Indigenous Affairs and was attended by various government officials. 17/

A number of sample surveys of internal migration were conducted during the period, among them a survey of in-migration to metropolitan Lima, conducted by ONEC in 1965.

15/ Oficina Nacional de Estadística y Censos, Boletin de Análisis Demográfico, No. 10 (1970), p. 32.

16/ "National monographs on immigration policy for some Latin American countries" (ILO (02) 04 N2), p. 86.

17/ Henry F. Dobyns y Mario C. Vásquez, eds., Migración e Integración en el Perú (Lima, Monografías Andinas, 1963).

Government perception of spatial distribution

The subject of regional disequilibrium has preoccupied Peruvian specialists since José Carlos Mariátegui published his famous Ensayos in 1928. 18/ The comprehensive development plan for the period 1962-1971 reported that Peru's economic development had been characterized by profound regional imbalances. The plan reported, for example, that during the period 1950-1960 the per capita product of the littoral had increased by 21.6 per cent, and that of the sierra had increased by 18.3 per cent, whereas that of the selva had decreased by 10.6 per cent.

The administration of Fernando Belaúnde Terry was concerned with the persistence of regional imbalances and considered the opening of the selva to permanent settlement and the integration of homogeneous zones to be major development goals.

The long-term development strategy, drafted during the final months of the Belaúnde administration and adopted by the Government of the Armed Forces when it came to power in 1968, noted that the type of economic growth that had occurred in Peru, dependent capitalism, had resulted in the economic strengthening of the metropolitan centre and had deformed the productive structure of the country. One of the long-term goals of the strategy was to bring about a better distribution of the population within the national economic space, avoiding the tendency towards growing concentration in the coastal zone, particularly in the metropolitan centre, through the formation of compensatory development poles in strategic regions. The strategy noted that the present migratory trend was principally a result of the great differences in economic conditions between the metropolitan centre and the remainder of the country.

With regard to future trends, the strategy predicted that during the next two decades the country would become predominantly urban, with some two thirds of the population eventually residing in urban areas.

Policy with regard to spatial distribution

The first regional planning efforts date back to the period after the Second World War when the regional plan for southern Peru (1959) and the Peru-Via plan (1960) were conceived. The latter plan, which was elaborated by an American consulting firm, envisaged the integrated development of an area on the eastern slopes of the Andes in central

---

18/ José Carlos Maríategui, Siete Ensayos de Interpretación de la Realidad Peruana (Lima, Biblioteca Amauta, 1952).

Peru and was to have culminated in the city of Peruvia, a large industrial centre. A study conducted by the German Development Institute noted that "these regional plans may be considered as the forerunners of regional planning in Peru. They were certainly useful for the implementation of one or two isolated projects but did not lead to any concrete regional planning. This was only introduced when the general planning system was set up following the conference of the Alliance for Progress". 19/

In 1962 a Presidential commission was appointed to study and report upon urban development in the country. The commission proposed a system of eight regional planning councils and planning regions which would serve as the basis for regional development, rather than the existing departments. In 1965 the National Planning Institute undertook preparatory work for the first comprehensive regionalization of the country, the results of which were incorporated in the national development plan for the period 1967-1970, in which it was proposed that the 25 departments be aggregated to form eight planning regions. The German Development Institute noted, however, that the strategies and measures for a regional policy which were elaborated in the 1967-1970 plan were vague and had little relation to the measures of general development planning. In the long-term strategy drafted in 1968 a new regionalization had been proposed, which would have divided the country into four large planning regions and 11 subregions.

The major spatial policies of the Belaúnde administration were the opening of the selva to permanent settlement and the integration of homogeneous zones, the most well-known example of which was the Marginal Forest Highway, a major road along the eastern foot of the Andes linking the individual colonization areas of the selva with one another.

The long-term development strategy also proposed the creation of "demand centres" around new urban growth poles which would redirect migratory flows from Lima-Callao.

19/ Peter Waller, Problems and Strategies of Regional Planning in Developing Countries (Berlin, German Development Institute, 1971), pp. 3-4.

II. THE PERIOD 1968-1976

The political and economic situation

The Government of the Armed Forces, installed in 1968 under the leadership of General Juan Velasco Alvarado, immediately began a major transformation of Peru's socio-economic structures. The Government's goal of transferring economic and political power to the majority of the population was begun by modifying the structure of property ownership and reducing the control of the dominant class over the key mechanisms of the economy. A revolutionary process of agrarian reform was initiated, involving the transfer of farms and agro-industrial complexes such as sugar plantations and refineries. Industrial, credit and tax reforms were to make economic benefits accessible to the neglected sectors of the population. Basic industries that produced inputs for other productive activities were reserved for state enterprises. A legal enactment with great social significance established that 10 per cent of the net income of an enterprise would be distributed among the workers and that 15 per cent would be invested in the name of the industrial community. At the ministerial level, a new institutional arrangement, the National System for Support for Social Mobilization (Sistema Nacional de Apoyo a la Movilización Social/ SINAMOS), had the following principal goals: diffusing the process of change throughout the population; creating the capacity for participation in production; and organizing the marginal population, channelling their actions in support of the proposed change. 1/

Mounting economic difficulties led to the overthrow in August 1975 of President Juan Velasco Alvarado, who was replaced by General Francisco Morales Bermúdez, Commander-in-Chief of the Peruvian Army. In 1975 the country imported almost twice as much as it exported, resulting in a net trade deficit of more than $1 billion. Inflation in 1975 reached more than 30 per cent, an unusually high rate for Peru. Many of the country's economic problems were brought on by factors beyond the Government's control: copper, one of the main sources of earnings abroad, was affected by low prices; the shoals of anchovy that provide fishmeal, Peru's other main export, had dwindled in recent years; and a large government investment in oil exploration in the Amazon jungled failed to discover the expected petroleum.

The economic crisis--including steep inflation, unemployment, production declines and a worsening trade balance--abruptly halted ambitious income redistribution programmes and affected many of the

---

1/ "Informe sobre la experiencia nacional adquirida al introducir modificaciones sociales y ecónomicos de gran alcance para fines de progreso social" (E/CN.5/478/Add.1), pp. 83-85.

revolution's accomplishments. For example, the Government has indicated that the distribution of farmland under the agrarian reform programme may be halted. 2/ In July 1976 the sol was devalued 44 per cent in a move to promote exports and reduce imports. The nationalized fishing industry, Peru's largest single source of foreign earnings, is being returned to private ownership, and nationalist policies against foreign investment have been tempered in view of Peru's need for capital to develop mining. Foreign loans of $400 million are being arranged with a consortium of private banks in the United States of America. 3/

Development planning

Beginning in 1969 the National Planning Institute received assistance from the United Nations Development Programme (UNDP) in such planning areas as budgetary economics and social development programming. In its country programming report for the period 1972-1976 UNDP recommended that since the revolutionary process then being undertaken in the country involved the difficult task of changing the traditional structures which adversely affected the masses, it was necessary to strengthen the planning system so that the process of changing those structures could be duly planned. UNDP reported that regional branches of the National Planning Institute, ORDECENTRO and ORDEORIENTE, would be established in order to strengthen the national planning system.

INP is assisted in the preparation of global plans by the National Planning Commission and by various regional, sectoral and global commissions on employment, social mobility, social security, reform of public administration, science and technology, territorial adjustment and natural resources, construction, commerce, and integration and finance.

One month after the assumption of power by the Velasco Government in 1968 it was decided that the long-term development strategy that had been developed by the National Planning Institute under the former Government would be accepted. 4/ An annual plan was drafted for the year 1970, followed by a biennial plan for the years 1971-1972. A comprehensive national development plan, Plan del Perú, was formulated for the period 1971-1975, 5/ followed by a more concise global plan for

---

2/ The New York Times, 4 August 1976, p. 10.

3/ The New York Times, 24 June 1976, p. 45.

4/ Estrategia del Desarrollo Nacional a Largo Plazo (Lima, Presidencia de la República, Consejo Nacional de Desarrollo Económico y Social, 1968).

5/ Plan del Perú, 1971-1975 (Lima, Presidencia de la República, Instituto Nacional de Planificación, 1971).

the years 1975-1978. 6/ The purpose of the latter plan, which will be extended by a short-term plan for 1979-1980, is to proceed with the consolidation of the social and economic model established by the Government, in contrast to the 1971-1975 plan, which was based on the realization of structural change.

Information on the general demographic situation and trends

The Population and Development Studies Centre continues to carry out demographic research and sponsor training. In 1970 it published Informe Demográfico del Perú, a compendium of government-sponsored and non-official research. 7/

In 1972 the population unit within INP was transferred to ONEC. In a monograph prepared by ONEC in 1974 in observance of World Population Year--a work that will be cited frequently in the present paper--a lack of co-ordination among institutions undertaking the analysis of demographic subjects was noted. It reported, however, that INP was aware of these organizational shortcomings and was taking steps, in co-ordination with the Statistical Office, to eliminate the inefficiency. 8/

According to the Government's most recent policy statement, issued in 1976, the Bureau of Demography (formerly the Office of Population Studies) now operates within the Bureau of the Census, Surveys and Demography, which is a division of the National Statistical Institute. The Bureau is currently analysing the 1972 Census results, as well as data obtained from recent demographic surveys. In addition to basic demographic studies, the National Statistical Institute, in co-operation with the National Planning Institute, the Ministry of Labour and the Ministry of Education, is undertaking a more ambitious programme of studies, which will permit the analysis of demographic, economic, social and cultural variables linked to migration, employment, and internal distribution, within the context of population and development policies.

A census was conducted in July 1972. In light of the considerable demand for census data, a preliminary volume was issued 70 days after the enumeration, in contrast to the Census of 1961, a number of volumes of which had not been published as of 1974. The United Nations Fund for Population Activities (UNFPA) provided financial assistance to the Population and Development Studies Centre in 1973 in completing

---

6/ Lineamientos del Plan Nacional de Desarrollo para 1975-1978 (Lima, Ediciones del Centro, 1975).

7/ Informe Demográfico del Perú (Lima, Centro de Estudios de Población y Desarrollo, 1970).

8/ La Población del Perú (Lima, Presidencia de la República, Oficina Nacional de Estadística y Censos, 1974), p. 333.

the analysis of the Census of 1972 and expediting the printing, publication, and dissemination of the results. Additional financial assistance was requested and approved for preliminary activities related to the Census of 1981, such as cartographic studies and fellowships.

In 1975 the Government received financial assistance from UNFPA for the purpose of conducting a multiround demographic survey similar to one that had been conducted in Honduras. 9/ If the results of the proposed survey were successful in Peru, the Government indicated that it would consider the possibility of creating an ongoing survey.

In its reply to the Second United Nations Inquiry, transmitted in 1974, the Government reported that courses had been offered at both the national and the regional level for the training of civil registrars. In addition, employees of the Ministry of Public Health had received training at the Latin American Demographic Centre. In its most recent policy statement, issued in 1976, the Government noted that an intensive course in demography would be offered in the second semester of 1977, in co-operation with CELADE.

General policy with regard to the demographic situation and trends

In 1970 the Comisión Horizontal de Población y Ocupación was formed to recommend a population and employment policy to be included in the 1971-1975 development plan, raising expectations that the Government might be on the verge of formulating a comprehensive population policy. Although the Commission recommended that the plan include measures to reduce fertility rates, only one explicit demographic policy objective was adopted: to reduce the disequilibrium in the distribution of the population within the national territory. 10/

The Government has formulated a number of indirect policies. In its reply to the Second United Nations Inquiry, the Government drew a distinction between its indirect and its explicit policies, noting that whereas the latter consisted chiefly of health-related measures, the former included such measures as employment creation, which would directly affect internal migration, programmes of sex education and the incorporation of women into the labour force, which would indirectly affect fertility.

The Government has emphasized that the population component is fully integrated into over-all development plans. In its reply to the Second United Nations Inquiry it reported that the National Planning Institute took demographic factors into full account in the formulation

---

9/ See Encuesta Demográfica Nacional de Honduras (EDENH), 1972.

10/ José Donayre, op. cit., p. 6.

of its principal plans and objectives. It further emphasized that information on levels and trends of internal migration and projections of the economically active population were basic to global planning.

The Government was represented at the World Population Conference, held at Bucharest, Romania, in August 1974, and at the Second Latin American Meeting on Population, held in Mexico City in March 1975, and issued country statements at both meetings. Although the Government had replied to the Second United Nations Inquiry in 1974, it informed the Secretariat in 1976 that it did not intend to submit a reply to the Third United Nations Inquiry, due to the fact that its population policy was under review.

In August 1976 the President and the Minister of Health issued a policy statement in the form of guidelines for population policy, which were drafted by a multisectoral commission. 11/ The Government reported that the third section of the document, on population policies, would be considered part of the national development plan for 1975-1978. The statement emphasized that all development policies might be considered population policies in an implicit and indirect sense...Nevertheless, given the primordial importance of population in its strictly demographic sense (fertility, mortality, migration) in achieving global development objectives, the Government should adopt an active role with respect to the volume, growth, structure and distribution of the population, while fully respecting the rights of individuals.

The First National Seminar on Population Policy was convened at Lima in December 1976 and was attended by representatives from the ministries of labour, housing, education and nutrition, the heads of the National Planning Institute, the National Statistical Institute and the Advisory Committee of the Prime Minister, as well as by representatives of SINAMOS, the National Committee of Peruvian Universities, the Peruvian Episcopate, women's organizations, the Peruvian Medical College and various United Nations agencies. The seminar was convened in order to make public the population programme approved in the guidelines for population policy, a document that one working group suggested should be disseminated more widely by means of the communications media in a manner that would be easily comprehensible to all strata of society. The sessions focused on the need to take specific action in relation to population policy in all sectors of society.

11/ Lineamientos de Política de Población en el Perú (Lima, Presidencia de la República, Instituto Nacional de Planificación, 1976).

the year, enabled one to look upon the economic future of Peru with optimism. Owing, perhaps, to the recent economic slow-down and to such factors as the failure to find expected petroleum reserves in the selva, the Government's recent policy statements have been somewhat less optimistic. Underlining the limits to the country's natural resources, the 1976 guidelines for a population policy noted, for example, that of a total surface area of 128,521,650 hectares, only 2,793,360 were suitable for agriculture. So, too, whereas the man/land ratio was 5.7 inhabitants per cultivated hectare in 1970, it was estimated that the figure would rise to 6.1 by 1980. The guidelines further reported that domestic food production did not cover internal consumption needs, since the internal supply was growing at a slower rate than that of population growth.

The Government has similarly modified a number of its previous statements in relation to the impact of population structure, particularly on medium-term employment prospects. In a monograph prepared in observance of World Population Year, the Statistical Office had emphasized that the country's rapid population growth and resultant demographic structure were a positive result of the development process. In a discussion of employment prospects, the Statistical Office had estimated that the economically active population would consist of 5,065,000 persons in 1975, an increase of nearly 800,000 workers with respect to 1970. The report predicted that the growth of the economy during the five-year period would permit the creation of some 1,164,000 jobs, thus absorbing the new entrants as well as those who were at that time unemployed or underemployed. The Government's most recent policy statement expressed a substantially different view. The guidelines for a population policy reported that a high level of fertility over time, in the absence of international migration, had produced an age pyramid with a wide base. The volume of the labour force was small with respect to the total population, due to the high proportion of minors under 15, and its rate of growth was greater than the national population growth rate. This phenomenon increased the need for rapid employment creation and, in developing countries, strained the limited resources available for investment. Noting that the savings that a country may generate are approximately one fifth of its product, a figure that may be somewhat optimistic for many of the developing countries, the guidelines emphasized that in the less developed countries the number of workers was increasing by less than 1 per cent. The disparity between the more developed and less developed countries in absolute figures and in the investment per new worker coefficient was consequently very large. As a specific illustration of the problem, the guidelines reported that in 1976 the Peruvian labour force had increased by 170,000 workers, while that of the Federal Republic of Germany, with a labour force and total population that are, respectively, six times and four times larger than those of Peru, increased by 100,000. As a result, the

total amount of savings would be 30 times greater in the Federal Republic of Germany than in Peru, whereas the investment per new worker would be some 50 times greater.

At the First National Seminar on Population Policy a number of government ministers emphasized the adverse consequences for their respective sectors (health, employment, housing) of continuing high rates of population growth. However, the emphasis of their addresses was largely on the ramifications of rapid and disordered urban growth, resulting from levels and trends of internal migration.

In general, the Government considers that a rate of population growth which is compatible with the country's development requirements will be brought about by means of structural change and the creation of a national environment in which families will be able to exercise free option with respect to family size. At the First National Seminar on Population Policy the head of the National Planning Institute reported that, given the country's low level of economic and social development and such factors as the low status of women and the lack of maturity in interpersonal relationships, it could be anticipated that more intensive and co-ordinated efforts, together with the provision of adequate contraceptive means and health education programmes, would bring about a state of demographic equilibrium.

Policy with regard to size and growth

As UNDP noted in its country programming report for 1972-1976, Peru's development plan for 1971-1975, in accordance with the basic principles of the revolution of 1968, considered development to be a process in which structural change must precede economic growth. UNDP reported that this concept of development was very important in a country such as Peru, in which the economic and social situation was marked by a rigid social structure with sharp contrasts in the distribution of wealth, by lack of articulation of an economic structure whose productive capacity was incipient and whose multiplier effect was almost nil and by subordination of the Peruvian economy to foreign-decision-making centres. With a view towards breaking the cycle of unequal development, stagnation and marginality, the Government of the Armed Forces had begun a number of fundamental reforms, which in economic terms might be summarized as improvement in the distribution of income, accelerated growth of the economy and reduction of dependence. Specific reforms seeking to bring about structural change included agrarian reform, involving the transfer of some 11 million hectares, the incorporation of various basic industries into the public sector and the dynamic role assigned to State-owned entities in the process of capital accumulation and investment.

Within this context, the Government's subsequent development plan for 1975-1978 outlined the following broad development objectives: to strengthen and consolidate those structural reforms which had been achieved; to continue to support the concept of economic pluralism; to raise production levels and improve distributive machinery, especially for essential goods; to significantly reduce levels of unemployment and underemployment; to reduce the socio-economic imbalances between the various regions of the country, and to consolidate the control of natural resources by the State. 15/

The Government has recently emphasized that its population policy forms an integral part of its over-all development strategy. In its most recent policy statement, issued in 1976, the Government noted that the population policy which was recently integrated into the Government's development plan had been designed to help bring about the objectives of structural change, and conversely, the mass of policies which constituted the over-all development strategy were designed to complement and reinforce the population policy.

In the same statement the Government justified its adoption of a population policy by noting that in formulating its guidelines for a population policy, three possible scenarios had been considered: in the first there would be no policy of structural change and no population policy, a hypothetical but admittedly unlikely situation which would be apt to result in a total population of some 36.0 million by the year 2000 and a dependency ratio of 96 per cent; in the second, a policy of structural change, in the absence of an explicit population policy, would result in an estimated total population of 32.0 million and a dependency ratio of 81 per cent; and in the third, a policy of structural change combined with a national population policy would result in an estimated total population of 27.7 million and a dependency ratio of 66 per cent. 16/

Although the Government considers that its decision to formulate and implement a population policy within its present development strategy will have an impact on population growth, it has continued to emphasize its refusal to set quantitative targets. At the First National Seminar on Population Policy, the head of the National Planning Institute, Brigadier General Luis Montoya Montoya, emphasized that Peru's population policy would seek the attainment of qualitative goals. Although the Government's recently announced policy was expected to have an impact on demographic trends and structures that could eventually be quantified, specific demographic rates would not constitute ends in themselves.

15/ "Country and intercountry programming and projects: country programme for Peru" (DP/GC/PER/R.2), paras. 23, 25.

16/ Lineamientos de Política de Población en el Peru..., pp. 33, 42-43.

Morbidity and mortality

Information available to the Government

The Statistical Office reported in 1974 that the study of Peruvian mortality was seriously constrained by the quality and coverage of the civil registers. The inherent deficiencies of the registration system, compounded by the low level of education and the isolation of a significant segment of the Peruvian population, largely explained the high degree of underregistration. Census data had been used to estimate mortality. Nevertheless, those data were not satisfactory and the measures so derived were only an approximation of the true levels of mortality.

The Statistical Office further reported that knowledge of cause-specific mortality was limited by the fact that all deaths were not medically certified, although certification had increased--from 29.1 per cent of total deaths in 1960 to 57.0 per cent in 1970. 17/ In its most recent policy statement, issued in 1976, the Government reported that an estimated 170,000 deaths had occurred in 1975, of which only 120,585 were registered, and of these, only 67.0 per cent were medically certified. 18/

In its reply to the Second United Nations Inquiry, the Government reported that life expectancy at birth was 51.1 years in 1961 and the crude death rate was 15.4 per thousand, reflecting a high level of mortality. It reported that around 1970 general mortality at the national level was still high, with the crude death rate--estimated by indirect methods--approximately 12-13 per thousand. 19/ In a monograph prepared in observance of World Population Year by the Statistical Office, considerably lower rates were cited. The crude death rate, although underestimated, indicated, as did census information, a decline in general mortality levels; for the year 1960 the crude death rate was 11.4, declining to 8.2 per thousand by 1970. 20/ Infant deaths constituted 27.9 per cent of total deaths and the infant mortality rate was on the order of 101 per thousand live births.

17/ Ministerio de Salud y Instituto Nacional de Planificación, Primer Seminario Nacional sobre Política de Población. Informe final (Lima, 1976), p. 95.

18/ Lineamientos de Política de Población en el Perú..., p. 17.

19/ Peru: Crecimiento Demográfico y Desarrollo..., pp. 10-11.

20/ La Población del Perú..., p. 87.

In its reply to the Second United Nations Inquiry the Government reported that infectious and parasitic diseases accounted for 49.6 per cent of total deaths and for 62.6 per cent of deaths in the age group 0-5. It noted that the insufficient provision of potable water and excreta disposal facilities, particularly in rural areas, was responsible for endemic disease. It was estimated that as of 1969 only 33 per cent of the rural population had access to safe drinking water and 27 per cent to sewerage; the percentages were 59 and 57 per cent, respectively, in urban areas.

With regard to nutrition, the Government's reply to the Second United Nations Inquiry noted that there had been an improvement in its knowledge of nutritional deficiencies over the period 1950-1970. A number of sample surveys conducted in the country's major regions (littoral, selva and sierra) had revealed that the average caloric intake was approximately 2,068 calories. The first formal analysis of nutritional problems and formulation of nutrition-related policies was undertaken in 1973. The Government reported that it hoped to alleviate future nutritional problems by means of ongoing sample surveys such as the national-nutrition survey (Encuesta Nacional de Consumo de Alimentos/ECNA), conducted in 1973.

The Government reported in 1974 that the ratio of physicians per inhabitant, as of 1969, was 1:709 for Lima and 1:804 for Callao, whereas the ratio fell to 1:16,000 and 1:14,000 for Huancavelica and Cajarmarca, respectively. In the same year the national average was reported to be 1:1,917. Whereas there had been 122 hospitals in the country in 1950, the number increased to 332 by 1972, although a majority were concentrated in the capital and in the principal cities. While the ratio of hospital beds per thousand population was 4.4 in Lima, there were seven departments in the interior where the ratio was less than 1 per thousand. The Statistical Office reported in 1974 that the number of sanitary posts had progressively increased--from 428 in 1964 to 135 in 1972; nevertheless, the rate of activation of new sanitary posts had not permitted a significant increase in the coverage of the rural population.

The Statistical Office reported in 1970 that the most plausible mortality hypothesis used in its projections assumed a life expectancy at birth of 71 years by 1995-2000. 21/ In its most recent policy statement, issued in 1976, the Government reported that mortality would decline principally as a result of a decline in infant mortality, and the present expectancy of life at birth (56 years) would increase to 64 years in 1990 and to 70 years in the year 2000. 22/

21/ Oficina Nacional de Estadística y Censos, Boletin de Análisis Demográfico, No. 10 (1970), p. 31.

22/ Lineamientos de Política de Población en el Peru..., p. 41.

Government perception of levels of morbidity and mortality

The Government considers present levels of morbidity and mortality to be unacceptable. In its 1974 reply to the Second United Nations Inquiry it reported that in spite of efforts undertaken for the expansion of services in the health sector, health care facilities remained insufficient, especially in rural areas.

The Statistical Office reported in 1974 that the level of health of the population was unsatisfactory. High morbidity rates persisted for transmissible diseases; in spite of the development programmes to prevent diseases that could be controlled by vaccination (whooping cough, measles etc.), such diseases continued to have relative weight, as did morbidity related to deficient basic sanitary conditions. In its most recent policy statement, the Government reported that the risk of sickness and death was high. In spite of the fact that there was a declining tendency in general mortality, the risk of dying in the first year of life (101.4 deaths per thousand live births) remained high, exceeding the rate in developed countries by more than six times. The statement further noted that 60.0 per cent of deaths in the 0-5 age group were related to nutritional deficiencies.

The Statistical Office noted that problems in the sector were related not only to poor sanitation and poor nutrition but also to an underdeveloped infrastructure; the progress attained by the sector was, fundamentally, a result of technological development. Nevertheless, much remained to be done. In particular, a more rational and equitable distribution of services and a maximization of the installed capacity, especially in the private sector, were needed. The high cost of private medical care, for example, prevented it from having a wide coverage. The health infrastructure was considered to be particularly inadequate in rural areas; an estimated 3 million peasants were reported to have limited access to health care services since they lived far from those facilities. UNDP confirmed the Government's assessment of the health care situation, noting in 1975 that "for years great efforts have been made to consolidate a health infrastructure to satisfy the country's health needs, especially those of the rural sector which comprises more than 40 per cent of the total population. However, health services continue to be limited, and nearly 3 million people in the rural areas are still without medical care." 23/

The Government's 1976 policy statement was equally critical of the health infrastructure, noting that the resources of the sector were distributed among multiple institutions which were not integrated. A majority of them, with the exception of the Ministry of Health, undertook curative rather than promotional or preventive activities. Human resources had deteriorated with respect to the ratios observed in 1964 and had failed to keep pace with the growth and distribution of the

---

23/ "Approval of large-scale UNDP assistance to a project of the Government of Peru" (DP/PROJECTS/899), paras. 1-2.

population. Financial resources, in terms of health institutions and hospital beds, were concentrated in Lima and the various department capitals. In general, there existed a deteriorating ratio of beds to inhabitants, from 2.35 per thousand population in 1964 to 2.12 per thousand in 1974.

The Government's basic perception of the health status of the Peruvian population is that necessary improvements must be related to structural change. It emphasized in 1976 that unsatisfactory levels of morbidity and mortality were a result of the continuing interaction of diverse factors, such as the growth, structure and spatial distribution of the population, the low level of the domestic product and its inequitable distribution, deficient housing and basic sanitation, malnutrition, low educational levels and the limits and deficiencies of the health infrastructure.

Policy with regard to morbidity and mortality

A programme for malaria eradication, which had received assistance from UNICEF since 1957, was incorporated in the National Health Plan for 1966-1970. By 1970, 4,736,546 Peruvians had been covered, 24.4 per cent in the attack phase, 48.2 per cent in the consolidation phase and 27.4 per cent in the maintenance phase.

Government plans for the provision of safe drinking water and waste disposal facilities focused largely on rural areas with fewer than 2,000 inhabitants. During the period 1967-1971 more than 200,000 metres of pipeline were installed, providing coverage to 10 per cent of the rural population. UNICEF provided assistance for a rural water supply plan in 1972. The National Urban Water and Sewerage Plan targeted a coverage of 78 per cent of the urban population by 1975. 24/

Between 1969 and 1972 UNICEF, with the assistance of the Food and Agriculture Organization of the United Nations (FAO), assisted the Government in an applied nutrition project at the national level. According to an evaluation undertaken in 1973, "the results of the programme were not optimal, because the organizational and administrative structures had not been properly adapted to the various regions and there had not been enough parallel and simultaneous action in each of the participating sectors". UNICEF reported in 1975 that "in accordance with the National Food and Nutrition Policy, and especially the results of the national nutrition survey and the experience gained in the Applied Nutrition Programme, an effort will be made to solve the malnutrition problem by study and research relating to productive activities...The aim is not to solve all the food and nutrition problems of the region, but to find some practical and realistic solutions." 25/

24/ La Población del Perú..., p. 240.

25/ "Project proposed for Peru: integrated services for children" (E/ICEF/P/L.1616), paras. 37-38.

At the beginning of 1969 the Government embarked upon a complete reorganization of the Ministry of Health and its services. One of the important goals of the reorganization, which culminated in the formulation of the National Health Plan for 1971-1975, was the achievement of greater operational flexibility and administrative decentralization of services. 26/ The reorganization affected central as well as peripheral services, under the newly established Department of Integrated Health Services (Dirección General de Servicios Integrados de Salud). With regard to operational aspects, peripheral services were reorganized into 12 health zones that were to be responsible for the planning and implementation of programmes in the field of family and child health and welfare. The Government assigned high priority to improving health services in the Departments of Piura and Tumbes since they were situated in a potential development zone, according to the global plan for 1971-1975.

In an effort to support regional development policies, the Government has recently focused efforts on regions suffering from the greatest social and economic depression, with projects consisting of a complex of interrelated and complementary activities aimed at social change and the extension of social services. During the early 1970s, in accordance with the objectives of the national development plan for 1971-1975, priority for the extension of health services was assigned to the northern region. Using the methodology set out in the national programming guide and the procedures used in the North-West Health Zone (Piura-Tumbes), the Ministry of Health, with the assistance of advisers from the Pan American Health Organization drafted a health plan for 1975-1978 for the Puno region in eastern Peru. The plan sought to improve the health level of the most vulnerable groups in rural areas. To that end, it planned to expand basic services, emphasizing preventive action and the better allocation of human and financial resources. The following targets have been set:

(a) A vaccination campaign will seek to reduce morbidity from 52 to 25 per thousand population;

(b) With regard to supplementary feeding, a food ration of 460 calories a day will be provided for 60 per cent of the school population;

(c) Food production and conservation systems will be improved through the establishment of family and school gardens and farms and the training of professional workers, teachers and parents in the implementation of nutrition education programmes;

(d) With regard to sanitation, drinking water supply facilities will be expanded from 1.5 to 13.8 per cent of the population in rural

---

26/ "Project proposed by Peru: health services" (E/ICEF/P/L. 1517), para. 3.

areas and from 62 to 67 per cent in towns of fewer than 2,000 inhabitants;

(e) Waste disposal services will be extended to 20 per cent of the rural population, with priority being given to the school-age population;

(f) Medical coverage will be increased from 26 to 40 per cent through auxiliary nursing services;

(g) An attempt will be made to reduce maternal mortality from 8.7 to 5.0 per 1,000 live births by increasing the coverage of prenatal care to 40 per cent of Peruvian women and to reduce infant mortality from 102 to 90 per thousand.

UNICEF reported that with regard to simplified medicine, coverage for the hitherto underprivileged population would be increased from 22 per cent to 40 per cent through activities of auxiliary health workers.

The second goal of the Government's recently announced population policy is to bring about a significant reduction in morbidity and mortality, especially of women and children, which will permit improvement of the quality of life and the life expectancy of the total population. The Government noted that as a means of extending life expectancy and restructuring the age profile of the population, particular attention would be given to the population over age 65.

Fertility

Information available to the Government

Incomplete registration of births remains a factor that limits the analysis of fertility levels and trends. The Government reported in 1976 that only 75 per cent of births are properly registered.

A number of fertility surveys have been conducted at periodic intervals, such as the rural fertility survey conducted by the Centre for Manpower Studies of the Ministry of Labour in 1969 and a survey of induced abortion in metropolitan Lima conducted by the same centre in 1970. 27/ In requesting financial assistance from UNFPA in 1974 to conduct a demographic survey, the Government noted that although a number of surveys had been conducted, the data collected had been inconsistent and based upon small samples and had provided insufficient information on fertility levels and differentials.

The Government's reply to the Second United Nations Inquiry reported that census data and fertility surveys conducted during the period 1960-1970 had revealed that the fertility of the Peruvian

---

27/ Peru: Crecimiento Demográfico y Desarrollo Económico y Social..., p. 43.

population remained at a high level, with a crude birth rate on the order of 41 to 42 per thousand around 1970. In a monograph prepared in observance of World Population Year, the Statistical Office reported that the crude birth rate had been approximately 45.4 per thousand during the 1960s but at some time after that, fertility commenced a slow decline. Estimates indicated that the average annual crude birth rate between 1965 and 1970 was 41.8 per thousand, although the data did not permit a precise identification of the period at which fertility arrived at this lower level. The child/woman ratio, which had declined from 818 per thousand women in 1960 to 735 in 1970, seemed to confirm this tendency. 28/

With regard to differential fertility, the Government's reply to the Second United Nations Inquiry reported that the most pronounced decline in fertility levels had been recorded in metropolitan Lima, where the gross reproduction rate had declined from 2.4 in 1940 to 2.2 in 1961, and to 2.1 in 1965. It suggested that the reduction in fertility on the national level was almost entirely due to the process of urbanization in the country and principally to that of metropolitan Lima. The following regional differentials were cited: the crude birth rate was reported to be 44 per thousand population on the coast, 43 in the sierra, and 49 in the selva, whereas it declined to 37 per thousand population in metropolitan Lima.

The Statistical Office reported in 1974 that on the basis of the 1961 Census the degree of association between fertility levels in the principal cities and the economic and social development of these cities had been investigated. The findings revealed that there were significant differences in fertility levels among the principal cities which were closely related to the relative degree of their development.

Projections issued by the Statistical Office in 1970 were based on three hypotheses. The first assumed constant levels of fertility during the period 1960-1980, with a gross reproduction rate (GRR) equal to 3.20 (the same as that observed in 1961), declining to 2.59 by 1995-2000. The second hypothesis, considered to be the more reasonable one, assumed a uniform decline, with the GRR falling from 2.59 in 1975-1980 to 2.15 in 1995-2000, equivalent to a decline of 4.5 per cent for each quinquennium. A third hypothesis was based on the assumption of a more rapid decline, with a uniform drop of 0.20 percentage points per quinquennium, greater than that experienced during the period 1960-1980 (of 0.175 percentage points for each quinquennium). 29/

The Government's recent policy statement, issued in 1976, noted that the crude birth rate would decline slowly, given the age structure of the population--from the present rate of 42 per thousand population to 37 per thousand in 1980, 31 per thousand in 1990, and to 24 per thousand in the year 2000.

28/ La Población del Perú..., p. 58.

29/ Oficina Nacional de Estadística y Censos, Boletín de Análisis Demográfico, No. 10 (1970), pp. 32-33.

Government perception of levels and trends of fertility

In its reply to the Second United Nations Inquiry, the Government reported that the decline in fertility which the country was then experiencing was slow and responded to the interrelationships between demographic phenomena and economic and social development. It did not expect a marked decline in fertility levels in the short term, since there was no national programme designed to attain that goal.

At the Second Latin American Meeting on Population, convened in 1975, the Peruvian delegation commented on the efforts of some Governments to reduce national fertility rates, emphasizing that Peru rejected that position because it viewed the issue solely from a quantitative-demographic perspective.

In its most recent policy statement, the Government identified three possible alternatives with regard to fertility behaviour in the medium and long term. Without a policy of structural change or an official population policy, the statement predicted that fertility would remain constant, although it noted that this was an improbable set of circumstances. With a policy of structural change but without a population policy, the Government predicted that fertility would undergo a moderate decline, attaining a total fertility rate of 4.6, a level that was still fairly high. Owing to the absence of an official policy, the greater part of the population, with neither education nor access to contraceptives, would be unable to exercise free and responsible options over family size. However, with the formulation and implementation of both a policy of structural change and an official population policy, the global rate would decline to 3.3 as a result of the free and responsible decision-making by families. Emphasizing that it rejected the setting of quantitative targets and in no way advocated a policy of birth control, the Government noted, however, that a decline was possible within the context of its present announced policy; it predicted that the crude birth rate would decline slowly given the existing age structure--to 37 per thousand in 1980, 31 in 1990 and 24 in 2000.

Policy with regard to fertility

Family planning services have not been widely available in Peru. Limited services have been provided by a private association, by the private medical sector and by a small programme organized by the Roman Catholic Church. The Peruvian Association for Family Protection (Asociación Peruana de Protección de la Familia/APPF), an affiliate of the International Planned Parenthood Federation (IPPF) was founded in 1967. In 1973 the Association consisted of a central office and eight clinics, four in Lima and the remainder in the provinces. The Christian Family Movement (Movimiento Familiar Cristiano), a programme affiliated with the Catholic Church and operating in Lima, sponsored an extensive educational programme on marriage and responsible parenthood and provided limited family planning assistance. In mid 1970 a

CONCLUSION

Peru's demographic trends and structures have been similar to those of a number of countries in the Latin American region during the last several decades. A significant and continuing decline in mortality beginning during the 1940s, together with high and constant fertility, brought about an acceleration in the rate of population growth: from 1.8 per cent per annum during the period 1900-1940 to 2.2 per cent per annum during 1940-1961, and to 2.9 per cent per annum during the period 1960-1972. Continuing in-migration to the coastal cities and, in particular, to the metropolitan centre of Lima-Callao, a process that rapidly gained momentum during the 1960s, strained the ability of the country's urban areas to absorb new contingents of migrants and led to sprawling urban growth.

Comprehensive planning commenced in Peru during the early 1960s and was accompanied by isolated attempts at regional planning. During this period the Government had difficulty assessing the effect of demographic phenomena on societal processes, due to insufficient knowledge of levels and trends of mortality, fertility and natural increase, largely as a result of the widespread underregistration of births and deaths.

During the administration of Fernando Belaúnde Terry, the existence of rapid and accelerating rates of population growth was explicitly recognized. In general, however, the Government considered that the opening of the high jungle to permanent colonization would divert surplus population from densely populated areas and would solve national problems resulting from high rates of population growth. The Government did, however, give its approval to a family planning programme in mid 1968, but owing to the change in government which occurred shortly thereafter, the programme was not put into operation.

During the final months of the Belaúnde administration the National Planning Institute drafted a long-term development strategy which was based upon the conviction that the country's unfavourable demographic trends and structures had been largely determined by its economic structures, which, in turn, had resulted from Peru's dependent situation in the international economic system. The plan postulated that economic restructuring would resolve national problems in relation to population growth and internal distribution.

In October 1968 the Government of the Armed Forces, under the leadership of General Juan Velasco Alvarado, assumed power and immediately began a complex process of structural reform, as a means of reducing national dependence and stagnation in the productive sectors. In its first years, the Velasco Government adopted the above-mentioned long-term strategy, a planning document that had considered the primary and secondary causes as well as the consequences of the country's demographic

programme patterned after the Christian Family Movement, the Family Lay Apostolate Programme (Programa de la Asociación de Trabajo Laico Familiar) was begun, with activities concentrated in the provinces.

In 1970 a population and employment commission had recommended adoption of an official policy that would include fertility reduction, but in the development plan for the period 1971-1975 only the recommendation to modify the geographical distribution of the population was adopted.

In 1973 the Government requested the assistance of the Pan American Health Organization in formulating a national maternal and child health plan that would include family planning. Financial assistance was to have come from UNFPA but in late November 1973 the Government reversed its decision to submit the plan. Subsequently, in December 1973 the Government also reversed its permissive attitude towards private family planning programmes and ordered APPF to cease delivery of family planning services by January 1974. The Minister of Health, in making the announcement, said that foreign Powers were attempting to force Peru to adopt a fertility control programme and that this would not be tolerated. The Association complied but continued its activities in the field of education. 30/

The Government's reply to the Second United Nations Inquiry reported that it did not foresee the inclusion of family planning programmes in national development plans during 1970-1980. Nevertheless, a number of private institutions then existed, such as APPF, the Christian Family Movement and the Family Lay Apostolate Programme, which operated private clinics where medical assistance and instruction was given to couples who desired to participate in family planning programmes. In addition, the Government permitted the sale in pharmacies of all types of contraceptives as a means of regulating fertility cycles. The law requiring a doctor's prescription was often not enforced. A decline in fertility would thus come about slowly through the private programmes, the extension of education to the masses proposed by the reform of Peruvian education, which would include sex education at all levels of instruction, and through urbanization.

In its 1976 statement, the Government announced three main policy objectives: to achieve balanced growth; to reduce morbidity and mortality; and to modify patterns of internal distribution. No policies or measures aimed at the reduction of aggregate fertility levels were specified. The Government did note the desirability of promoting action which would bring about an authentic responsible parenthood. With respect to fertility, the Government emphasized that the final decision and direct responsibility lay with the parents; the State had the

---

30/ A Survey of Institutional Development Activities and Needs in Latin America: Country Reports (New York, Population Council, 1975), p. 328.

trends and that proposed to achieve balanced growth, to reduce levels of morbidity and mortality and to resolve spatial problems, chiefly by means of economic restructuring. The Velasco Government's first comprehensive development plan for the period 1971-1975 outlined a broad and well-defined policy with respect to spatial distribution, the policy of territorial adjustment (acondicionamiento territorial), and put forth a comprehensive policy for the health sector. It did not contemplate direct governmental intervention to modify levels and trends of fertility or natural increase. The 1975-1978 plan, which reaffirmed the goals of the preceding plan, did not reflect any substantial change with respect to the Government perception of demographic problems or its strategies to resolve them. Again, as in the 1971-1975 plan, there was considerable emphasis on the need to resolve national problems arising from regional disequilibria and, in particular, those arising from disordered urban growth. In general, however, the Government considered that its over-all development strategy, with its strong emphasis on structural reform, would have a favourable effect on demographic phenomena. In its reply to the Second United Nations Inquiry in 1974, the Government noted that it had few explicit population policies, and those that did exist were chiefly health-related measures. It acknowledged, however, that although it did not intend to intervene directly in demographic processes, many of its efforts with respect to employment creation, the incorporation of women into the labour force and so on could be considered to be indirect population policies and were expected to have an impact on demographic processes.

In August 1976, following the recommendations of a multisectoral commission, the Government issued, as part of its 1975-1978 development plan, guidelines for a population policy in Peru. In December 1976 the First National Seminar on Population Policy was convened at Lima and was attended by representatives of the various government ministries and of organizations in the private sector with an interest in population matters.

Before discussing the implications of the Government's new population policy, it would be useful to review its position with respect to the integration of demographic factors in the planning process and the acceptability of various demographic trends. To begin with, the Government considers that there is need for continuing improvement of demographic statistics and places particular emphasis on the need for the full integration of demographic variables into economic and social development planning. At the First National Seminar on Population Policy, the head of the National Planning Institute, Brigadier General Luis Montoya Montoya, emphasized the need for the Institute to perfect and systematize the collection of demographic data and stimulate further demographic research--research that would fully elucidate the effects of demographic factors on the country's social and economic structures and, conversely, clarify the impact of economic, social and cultural factors on the dynamics and distribution of the country's population.

responsibility of promoting the transformation of economic, social and cultural structures that would increase the options available to families with respect to family size.

At the First National Seminar on Population Policy, the head of the National Planning Institute, Brigadier General Luis Montoya Montoya, emphasized that, given the country's low level of economic and social development and such inhibiting factors as the low status of women and the lack of maturity in interpersonal relationships, it could be anticipated that more intensive and co-ordinated development efforts, together with the provision of the means to exercise responsible paternity, would produce significant demographic results. However, the Government is insistent in its refusal to set quantitative targets for fertility reduction, noting that its policy for the sector will seek qualitative objectives: the strengthening of the family; equality between the sexes; free and responsible parenthood; adequate treatment of the child etc. Although significant effects on demographic trends and structures are anticipated, the Government emphasizes that they in no way constitute ends in themselves.

Immigration

The Government's reply to the Second United Nations Inquiry stated that the volume of international migration was slight and thus the Peruvian population might be considered to be a "closed" population. The foreign population registered in the Census of 1961, including tourists and persons in transit, comprised 0.7 per cent of the total.

The Statistical Office reported in 1974 that the volume of international migration was nil and that, as a result, it did not take this demographic component into account in formulating its projections.

No statement of government perception or policy is known.

Emigration

The volume of emigration is not demographically significant. No statement of government perception or policy is known.

Spatial distribution

Information available to the Government

There have been continuing efforts on the part of the Government to obtain information with which to analyse the patterns and consequences of

internal distribution. A national household survey and a census of "new towns" (pueblos jovenes) were conducted in 1970, while a survey of in-migration to metropolitan Lima was undertaken with the assistance of CELADE in 1975.

In the fall of 1976 the Government submitted a request to UNFPA for financial assistance for the following projects related to spatial distribution: "Spatial localization of population concentration on the coast--the prime cities of the country"; "Investigation of in-migration and colonization in the Department of Puno"; "Human settlements and migration--central region"; and "Study of migration and employment". In addition, the Government requested the services of an expert in the field of migration studies for a project designed to discover the fundamental reasons for migration from rural to urban zones, settlement patterns on the urban periphery and the economic activities to which migrants devote themselves in the receiving areas. The Government also expressed interest in colonization studies, noting that the process in the eastern region required various studies to determine the consequences of rapid economic growth. The need for studies of the selva, where petroleum and other natural resources were the object of intensive exploration, was also noted.

The Government has had substantial information from censuses and surveys with which to document the fact that the population is poorly distributed within the national territory. In its reply to the Second United Nations Inquiry the Government reported that density indices indicated a marked disequilibrium between highly dispersed zones of population settlement and zones of high concentration. The Census of 1961 reported density indices ranging from 66.1 inhabitants per square kilometre in the Lima-Callao region to 0.7 inhabitants per square kilometre in the eastern region. These differences were even more accentuated when these indices were examined at the provincial level; in this instance, the maximum value was reported to be 2,893 inhabitants per square kilometre in the Province of Callao, while the minimum value of 0.1 was to be found in Manu in the eastern region. The Government has repeatedly noted the continuing historical phenomena of uneven distribution and uneven rates of growth. The Statistical Office reported in 1974, for example, that whereas the country's total population had quadrupled in a century (1862-1961), that of the littoral increased eight times and that of the selva six, whereas that of the sierra barely trebled. This unequal growth at the regional level was largely the result of population redistribution and did not reflect significant differential growth.

Defining as urban those population centres of over 2,000 inhabitants, the Statistical Office reported that the urban population constituted 26.9 per cent of the total population in 1940, 40.1 per cent in 1961 and 53.0 per cent in 1972. Whereas the total population had grown by an average annual rate of 2.92 per cent during the intercensal period 1961-

1972, the urban-rural breakdown was 5.69 and 0.66 per cent. While there had been only three cities of over 100,000 inhabitants in 1961 (Lima, Callao and Arequipa, representing 19.7 per cent of the total population, with 17.1 per cent of the total residing in Lima), there were 10 agglomerations of that size in 1972, representing 33.5 per cent of the total population, with 23.4 per cent residing in Lima-Callao.

With regard to internal migration, the Statistical Office reported in 1974 that, as of 1970, 43.5 per cent of the population of the metropolitan centre could be classified as migrants. In recent years the metropolitan centre has been receiving approximately 100,000 migrants per annum. Nation-wide there has been a systematic increment in migration flows with each succeeding decade; no less than a third of the migrant population of the nation's cities arrived during the decade 1960-1970. In recent years five cities have been growing at a faster rate than Lima-Callao. Arequipa, the second largest city, has been growing at an average annual rate of 6.2 per cent, Trujillo at 8.1 per cent, Chiclayo at 6.5 per cent, Chimbote at 9.3 per cent and Iquitos at 6.2 per cent.

The Statistical Office reported in 1974 that the urban population was expected to account for 58.8 per cent of the total population by 1980, 66.7 per cent by 1990 and 77.3 per cent by the year 2000. In its reply to the Second United Nations Inquiry the Government reported that projections of migratory flows using base figures from the years 1950 and 1961 estimated that the city of Lima would receive 2,500,000 migrants during the interval 1961-1990, proceeding principally from the sierra.

Government perception of spatial distribution

The Government has been long concerned with the primary and secondary causes, as well as the effects, of Peru's patterns of spatial distribution, which it considers to be unacceptable. It has repeatedly identified the primary cause as being related to dependency. For example, in its national report to Habitat: United Nations Conference on Human Settlements, the Peruvian delegation emphasized that any analysis of the distorted growth of the principal urban centres would have to take into account the conditioning matrix of a traditional urban-region system. The report emphasized that the primacy of the metropolitan centre was a direct result of the outward orientation of the country's economic structures, which had assumed diverse forms in distinct historical periods. 31/

The Government has been equally concerned with the effects of spatial patterns on the economic system as a whole, as well as on unemployment, social services etc. The Statistics and Census Office reported, for example, in 1974 that the rapid concentration of population in urban

31/ "Informe nacional: Peru" (A/CONF.70/NR.22).

centres was far outpacing economic growth and would give rise to higher levels of unemployment, especially among those engaged in tertiary activities, to congested urban services and to a rise in the cost of living. The proliferation of squatter settlements on the periphery of the country's major cities was identified as a physical manifestation of the growing disequilibrium between spatial distribution and economic growth. At the First National Seminar on Population Policy the Minister of Housing underlined the magnitude of this problem of urban growth, noting that there were 839 "new towns" (pueblos jovenes) throughout the country, of which 319 were located in the metropolitan centre. These squatter settlements constituted 27 per cent of the total urban population, or more than 2,500,000 inhabitants, and approximately 30 per cent of the population of the metropolitan centre, or more than 1 million inhabitants. The explosive growth of the pueblos jovenes had produced exaggerated horizontal growth, which had substantially increased the cost of providing infrastructure to them. The Minister further noted that the process which was taking place could hardly be termed urbanization, a concept that denotes a certain degree of structural transformation and modernization, but was rather a matter of simple growth.

The Government has not only identified such distributional problems in an urban context but has emphasized that many of the most serious national problems--such as endemic unemployment--have a spatial dimension. In its national report to Habitat the Government noted that the coefficient of excess of manpower was 1.2 in the littoral (that is, for every worker required by the labour force, there were 1.2 available), 2.1 in the selva and 3.0 in the sierra. These figures translated into a structural excess of 2,307,000 workers in the sierra alone. The Government emphasized that, paradoxically, such manpower surpluses existed in a country in which only 34 per cent of the capacity of the land was utilized, as a result, in great part, of the maldistribution of the population within the national territory.

The Government considers that the monopoly of functions exercised by the metropolitan centre is a constraint on development and has hindered second- and third-order urban centres from capitalizing on the dynamic forces within their areas of influence, thus preventing a fuller utilization of the country's internal potential. It has consequently identified a reduction of the primacy of the metropolitan centre (in both a spatial and an economic sense) as a primary development objective. The Government's views on this subject are complex, however, and require further explanation. While identifying the constraints arising from the concentration of population and economic activity in the littoral, and particularly in the metropolitan centre, the Government considers that the coastal zone will continue to be the essential generator of growth in the economy and the area of greatest attraction for migrants. In its national report to Habitat, for example, it noted that the population would continue to distribute itself in the coastal cities, and principally in metropolitan Lima. It has further noted that for all of the problems resulting from the over-all distortion of the economic

system, metropolitan Lima has exhibited optimal conditions for the development of a modern urban centre. The Government, therefore, desires to capitalize on the positive characteristics of the metropolitan centre, by creating, for example, a number of satellite urban centres in a coastal corridor; although the national centre would continue to be metropolitan Lima, its hegemony would be reduced and the new planned urban-region system would reflect a growing interdependency between regions.

The Government accepts the inevitability of rapid urban growth and considers that the country's population will become predominantly urban (77.3 per cent) by the year 2000. Although the Government takes a favourable view of the growth of second- and third-order urban centres--for they will counterbalance the growth of the metropolitan centre--it has identified several problems arising from their rapid growth. A number of centres--Arequipa, Trujillo, Chiclayo, Chimbote and Iquitos--have been growing at a faster rate than the metropolitan centre. Since they have less developed infrastructures, they are less equipped to absorb large migratory flows. The Government reported in its reply to the Second United Nations Inquiry that whereas 25.6 per cent of the population of the metropolitan centre resided in "new towns", the proportion was 63.0 per cent in Trujillo, 37.5 per cent in Arequipa, 49.6 per cent in Piūra and 34.8 per cent in Chiclayo. However, it considers that planned urban development will reduce the constraining factors. For example, in its national report to Habitat it noted that the development of present and future cities would be fundamentally different from the disordered growth of cities in the past.

In its 1976 policy statement the Government expressed its reservations with regard to internal migration. Massive transfers of population towards the cities have, on a macro level, brought pressure to bear on already saturated labour markets in the few receiving areas of the coast, generated employment in marginal sectors and strained the provision of basic services; on a micro level, they have led to greater instability in family relationships, problems of adjustment etc. However, while identifying a number of serious constraints in relation to internal migration, the Government has recognized that such migration represents action taken by the population for the purpose of adjusting its distribution to the distribution of wealth and the opportunities for work. Furthermore, the Government's recent policy statement stressed that the migration of dispersed populations towards the large urban centres had been a continuing historical phenomenon that would be realistically impossible to contain. Given the saturation of vast rural zones (Cajarmarca, Puno etc.) and the marked differences in income distribution between rural and urban areas, the Government has predicted that the process will continue. However, it recently emphasized that, under its new policy of directed urban growth, migratory flows will be directed towards those zones favoured in the country's over-all development strategy (and to zones chosen for reasons of national security). The statement further noted that the distribution of population brought about by the new urban-regional policy would relieve the strong and growing pressure on already inadequate social services.

Clearly, the Government's perception of the acceptability of patterns of spatial distribution is quite complex. It considers that the monopolization of functions by the metropolitan centre is a constraint on development and that continuing out-migration from rural areas and rapid in-migration to second- and third-order urban centres with insufficient infrastructure pose a number of serious problems. Yet, it recognizes that all of these trends will continue: the metropolitan centre will remain the country's most important urban centre; a number of second- and third-order urban centres will continue expanding at a faster rate than the metropolitan centre; and massive out-migration from saturated rural areas will persist. However, the Government considers that its new urban-regional development policy will be able to mediate the adverse effects of these trends; it will attempt to reduce the hegemony of metropolitan Lima, better equip the smaller urban centres to absorb migrants and redirect the migratory flows that will inevitably occur.

Policy with regard to spatial distribution

One of the major objectives of the long-term development strategy drafted by INP during the final months of the Belaúnde administration and later adopted by the Government of the Armed Forces was to bring about a better distribution of population within the national economic space, avoiding the existing tendency towards growing concentration in the coastal zone, particularly in the metropolitan centre, through the formation of compensatory development poles in strategic regions. Noting that current migratory patterns were principally a result of the great differences in economic conditions between the metropolitan centre and the remainder of the country, the strategy proposed to counteract the attraction of Lima-Callao and to redirect migratory flows by creating new "demand centres" around urban growth poles. Four geographical regions were slated for development. In the north the pole was to be based on the exploitation of petroleum gas deposits and on the area's agro-stockraising potential. Development of the pole of Pucallpa would be based on the exploitation of hydraulic energy, natural gas, wood and salt. In the south, development efforts would attempt to establish interconnexions between cities in order to promote the development of agro-industry and of mineral industry, while development of the eastern region was to be based on the exploitation of the Amazon's resources, particularly those of petroleum. However, the major development efforts of the long-term strategy were to be concentrated in the northern and southern zones, and development of the selva region to the east was not assigned a high priority.

The development plan for 1971-1975 outlined a well defined policy of territorial adjustment (acondicionamiento del territorio). Among the medium-term objectives of the policy was the creation of "demand centres" which would compete with Lima in the attraction of population and investment. These centres were to be few in number and strategically located,

and their geographical characteristics would not differ greatly from those of metropolitan Lima, where it was thought that optimal conditions existed for the development of a modern city.

The plan also set forth four regional policies (for the north, centre, south and east), for the planning and execution of a long-term process of accelerated and self-sustaining growth in each region based on agro-economic units and other socially owned productive enterprises which would complement the economic development of other regions. In defininig the scope of its regional policies, the plan noted that the country's irregular topography and patterns of spatial distribution as well as its scarcity of capital for investment called for selective policies for the localization of economic activity. Such policies would focus on the concentration of state activity in those zones of greatest population density which had the most favourable conditions for the exploitation of natural resources, areas which were to be designated "zones of concentrated action". There would be differential treatment for the diverse zones of concentrated action, reflecting the establishment of distinct sectoral priorities for each type of zone. Priority would be given to the development of the littoral, excluding metropolitan Lima, where it would be most economical to make large investments in basic industries and where there were the most favourable natural conditions for the establishment of large cities that would compete with metropolitan Lima. A further component of the plan's strategy would be the strengthening of communications and other links between complementary production zones so as to create economic regions that would counterbalance the then centralized development process.

The 1971-1975 plan reported that the geographical areas with the greatest development potential would be divided into five zones:

(a) Zones of comparative advantage, with a concentration of mineral or fishery resources, a potential for intensive cultivation and sufficient infrastructure for the establishment of basic industries for the processing of those resources. During the plan period, investment in those areas would be concentrated in extractive and basic industries as a means of promoting self-sustaining development;

(b) Zones of relative development (excluding metropolitan Lima), undergoing rapid urbanization, with a broad agricultural base, a minimum transportation infrastructure and reasonably adequate social services --such factors that would permit their conversion in the medium term to demand centres that would compete with Lima in the attraction of migrants. Since these zones contained much of the best agricultural land in the country, development there would be undertaken largely by the private sector, with the State providing the necessary inputs in terms of agricultural infrastructure;

(c) Zones of saturated population, located in the sierra and characterized by high population density. Natural resources,

especially agricultural land, were limited there. Agrarian reform, consisting of changes in tenancy, credit and technical assistance, would constitute the major development thrust in these areas and would be accompanied by the provision of minimum infrastructure to permit the incorporation of these zones into the national economy;

(d) Frontier economic zones, located in the eastern region, with substantial natural resources and great potential as food-producing zones. During the plan period investment would be concentrated in activities complementary to the agricultural sector. Studies would be undertaken to determine the practicality of exploiting certain natural resources in these areas, such as gas, petroleum and wood;

(e) Metropolitan zones, basically consisting of the metropolitan centre (Lima-Callao). As a means of counteracting excessive centralism, the plan outlined a strategy which would extend the metropolitan area along a coastal corridor near the present city of Lima. It was expected that the promotion of urban growth within this corridor, by means of the creation of satellite nuclei, would significantly reduce the costs of settlement of the metropolitan population, while maintaining the advantages of proximity to Lima. The State would facilitate this development by providing the necessary infrastructure--highways, electrification, safe drinking water etc.

Although it identified development priorities in the five zones, the plan emphasized that an important part of the total investment, including money for basic infrastructure such as highways to connect the different regions, would be placed in areas other than the designated zones. Furthermore, department capitals located outside the zones of concentrated action would receive adequate attention.

In its reply to the Second United Nations Inquiry, the Government reported that in line with the 1971-1975 plan, its biennial public investment plan for 1973-1974 would seek to develop urban centres that would counterbalance the attraction of metropolitan Lima. In particular, the cities of Arequipa and Trujillo were designated to receive 680 million sols in public funds and some 3,000 million sols in private funds. The cities of Piura, Chiclayo, Trujillo and Chimbote in the north, Ayacucho, Huancayo and Ica in the centre, Arequipa, Tacna, Cuzco and Puno in the south, and Iquitos in the east would receive total investments on the order of 530 million sols for development of their basic infrastructure.

The development plan for 1975-1978, which proposed proceeding with the consolidation of the social and economic model established by the Government, in contrast to the 1971-1975 plan, which was based on the realization of structural change, identified a reduction in the socio-economic imbalances between various regions of the country and accelerated development of the frontier region as major development goals. In

further defining the policy of territorial adjustment, the 1975-1978 plan sought to orient the location of productive activities, social services and infrastructure in key regional development zones. These zones had been selected in such a way as to allow a complementarity of functions, bring about the integration of the country in a transverse sense and assure sufficient population in strategic frontier areas. The plan reported that the policy of territorial adjustment would vigorously continue those actions designed to modify the present radial articulation of the economy, an economy that was centralized in metropolitan Lima, in order to bring about an articulation of a transverse type and fortify a number of important centres, which would gradually serve as countermagnets to metropolitan Lima.

Specific objectives identified for the north were: to integrate the production of agrarian co-operatives; establish metal-working industries in Trujillo and agro-industry in Chiclayo; develop the mining potential of Cajamarca and Ancash; promote the integral development of the zone of Huallaga; develop the cities of Trujillo and Chimbote as countermagnets to metropolitan Lima, the cities of Piura, Sullana, Chiclayo, Cajarmarca, Tarapoto and Huaraz as support centres, and the cities of Tumbes, Bagua, Chepén, Chachapoyas and Moyobamba as secondary centres.

In the centre the objectives were to establish new rural and urban settlements in designated areas of the central selva and to stimulate the development of the cities of Huancayo, Ayacucho and Ica as support centres and the cities of Huánuco, Tingo Maria and La Merced as secondary centres.

Development activities in the south would focus on the development of mining and metallurgical industries (large-, medium-, and small-scale), improved agricultural production and the establishment of agro-industries, principally in Cuzco and in Puno, the development of infrastructure for tourism in Cuzco and Arequipa, and the establishment of metal-working industries in Arequipa, extractive industries in Ilo and Moquegua and light industry in Tacna. Efforts would be made to consolidate the city of Arequipa as a countermagnet to metropolitan Lima, develop the cities of Cuzco, Puno, Juliaca, Tacna, Moquegua and Ilo as support centres and the cities of Abancay, Quilabamba, Sicuani and Ayaviri as secondary centres.

In the east the plan proposed the provision of basic services and the stimulation of productive activity related to the exploitation of petroleum, wood, stockraising, tropical and semi-tropical agriculture and fishery resources. Further plans for the selva involved investigatory studies of little known areas and studies on the possible utilization of the natural resources of the region, as well as development of the Iquitos-Pucallpa axis by means of integrated projects which would rely on existing resources and improved infrastructure, the establishment of integrated development programmes to benefit the indigenous population (guaranteeing the preservation of their cultural patterns and a

substantial improvement in their standards of living), and the development of rural and urban settlements within a framework of integrated development, as a means of avoiding spontaneous colonization.

In order to bring about the long-term planning objectives outlined in its successive development plans--to reduce the serious social and economic imbalances among the various regions of the country and to bring about the optimal utilization of human and natural resources and maximum returns from public and private investment--the report of Habitat emphasized that it would be necessary to establish a directive policy in relation to urban development. While adhering closely to the goals and objectives of national development, planned and permanent action should focus on making decisions regarding the assignment of investment priorities and the reorientation of future migratory flows. In addition, it would be necessary to define the optimal size of and distance between cities as well as their degree of diversification or specialization. The report underlined that the Government's regional policy of urban development would seek to construct an urban-regional development model, define a normative system of cities, set up a typology of cities according to their degree of urbanization, population size, industrial base etc., formulate strategies and policies for urban development and devise the necessary legal and administrative machinery for the rational implementation of the above policies.

The Habitat report defined the following normative national urban system:

(a) In the first range was metropolitan Lima, which would decelerate its growth in the long term, arriving at a stabilized population on the order of 7,500,000 inhabitants;

(b) In the second range were the principal centres of the macro urban system, cities that would play an important role in the functioning of the national urban system by counterbalancing the attraction of the metropolitan centre and by directing and co-ordinating economic activity within their spheres of influence. These cities would display a strong potential for economic growth and a capacity for self-sustaining development based on capital and consumer goods industries and large-scale commercial activity. In their economic relationships with other areas they would assume a directive role, transferring technology, distributing durable goods, and constituting the principal consumer market in the area. The principal centres of the macro urban system would have high rates of population growth, greater than the national rate of 2.0 per cent per annum. They would attract population from less developed areas and would be equipped to absorb growing numbers of migrants and satisfy their fundamental needs. In the long term these centres in the second range would be expected to have a population size of between 400,000 and 1,200,000 inhabitants each;

(c) In the third range were the principal centres of the urban system, cities that would also assume a directive role in the development of

the urban-region system. The function of these centres would be to serve as secondary dynamic centres, providing the necessary surplus for the development of urban centres of a lesser range. They would be expected to have a rate of population growth approximately equal to that of the national rate and a long-term population size of between 100,000 and 500,000 each;

(d) In the fourth range were the principal centres of the urban subsystem, cities that would serve as centres of the urban-region subsystem, attaining a long-term population size of between 50,000 to 100,000 each:

(e) The fifth range would consist of sectoral urban centres which would serve as complementary urban support centres and have populations on the order of 20,000 each;

(f) The sixth range would consist of urban base centres, which would sustain extractive activities and have a population of 5,000 each;

(g) The seventh range would include major rural centres, centres possessing basic equipment for agricultural production, mining and fishing, with populations of some 2,000 each;

(h) In the eighth range would be base population settlements, nuclei of not less than 500 rural inhabitants each.

Whereas the national report to Habitat provided a theoretical framework for a normative system of cities and for an integrated urban-region system, the Government has been engaged in a number of substantive projects, with financial assistance from UNFPA, which are designed to modify the distribution of population within the national territory. Long-term objectives of the study on migration and employment, being conducted by the Employment Division of the Ministry of Labour are to determine the principal relationships between migration, employment, and other cultural and socio-economic variables. Immediate objectives are to examine the effect of the structural changes put into effect since 1968 on population, migration and employment: for example, to determine how urbanization and industrialization have influenced the evolution, characteristics and structure of population, migration and employment, how the accelerating process of urbanization has influenced fertility, mortality and participation in economic activity and how the continuing process of migration towards the various planning regions, chiefly towards metropolitan Lima, has generated disequilibria between the supply and demand for manpower in those regions. Two related projects which have received financial assistance from UNFPA are the investigation of migration and colonization in the Department of Puno, for which the executing agency is the Departmental Committee for Development in Puno, and base studies to complete the socio-political and population plan in the central region, for which the implementing agency is the regional office of the National Planning Institute in Huancayo.

Another project that has received financial assistance from UNFPA deals with human settlements and migration. It is designed to define

the necessary action for the implementation of previcusly announced spatial policies. The project essentially has a double thrust: to reduce out-migration from densely populated areas of the central sierra by diversifying their economic base; and to develop the potential of the selva, with a view towards absorbing excess manpower from other zones.

The third objective of the Government's most recent policy statement, issued in 1976, is to bring about a more rational distribution of population within the national territory, in accordance with the objectives of regional development and in the interests of national security. Further announced objectives are to promote settlement in sparsely populated frontier zones as a means of contributing to national development and ensuring national security and to redirect migratory flows towards new agricultural and industrial areas, thus counterbalancing the attraction of the metropolitan centre and enforcing the aspects of decentralization within the Government's policy of regional development.

At the First National Seminar on Population Policy one working group concluded that internal migration could be considered a basic human right, given the present societal context of extreme inequality between urban and rural areas, and that the process could be expected to continue as long as such inequality persisted. In order to deal effectively with the complexity of the country's spatial problems, the working group underlined the need for intervention, in order to modify a number of socio-economic as well as demographic factors. The following objectives, in particular, were outlined: to establish new rural development zones and intermediate urban centres; to provide basic services to the rural population; to modify the Government's internal pricing policies which tended to favour urban over rural enterprises; and to allocate governmental revenues among regions in a more equitable manner.

It was stressed that for many years demographic phenomena such as population structures had not been given sufficient emphasis in the calculation of demand for goods and services, nor had internal migration been given sufficient weight in regional and urban planning. However, it was reported that the Government intended to fully integrate demographic variables into all sectoral and global plans.

In addition to stressing data collection, demographic research and the need for the integration of demographic variables into all its plans, the Government has placed increasing emphasis on the need for institutional arrangements, both at the sectoral level and at a high administrative level, as a means of resolving demographic problems. For example, at the First National Seminar on Population Policy, the Minister of Health reported that a Bureau of Health and Population (Dirección de Salud y Población) would be established within the Bureau of Health Programmes (Dirección General de Programmas de Salud) in order to integrate fully the population component within health planning. So, too, the assembled delegates at the National Seminar on Population Policy recommended the establishment of a high-level advisory council, which would be given the power to formulate and evaluate national population policy. Such a council would represent the views of a broad constituency and would consist of representatives of the various government agencies and ministries, the Church, professional organizations and women's groups with interests in the population field.

With respect to morbidity and mortality, the Government has noted that in spite of the world-wide decline in general and infant mortality, the timing of this decline in Peru has been slower than anticipated. At the First National Seminar on Population Policy, the Minister of Health reported that there would be intensified efforts in the sector, focusing on the development of programmes of sanitary education, on the improvement of the health services infrastructure and on the broadening of coverage. Priority attention will be given to high-risk groups such as mothers and children, to the rural population and to the population of new urban centres and of older but rapidly expanding urban areas.

Although the Government has not listed fertility as one of the areas of demographic behaviour requiring intervention and has repeatedly emphasized its refusal to set quantitative targets, it considers that fertility will reach an acceptable level as a result of national consensus, that is, of combined governmental and individual efforts. It considers that it is the role of the Government to bring about structural change and to create a national environment in which families will be able to exercise free option with respect to family size. In addition, the Government will provide educational services and contraceptive means, but only as a method of facilitating free and responsible parenthood and not in any coercive sense or with a view towards decreasing individual or aggregate levels of national fertility.

The Government's position with respect to population growth is very similar to that on fertility. At various international meetings on

population, the Government has emphasized that problems resulting from high rates of population growth, particularly on a global level, are closely related to the need for social justice, and it has continued to maintain that the establishment of a new international economic order will resolve problems associated with population growth. At these international meetings, the various delegations representing Peru have emphasized the potential of the country's resources and expressed confidence that over-all development efforts would resolve demographic problems. The Government has recently tended to modify its previously optimistic position and has identified a number of problems in relation to continuing high rates of population growth, particularly with respect to land resources, food production and unemployment. However, in a broader sense, it may be said that the Government continues to hold very much the same view that it has held since 1968. While continuing to advocate more equitable international economic relationships, it considers that the achievement of greater economic and social justice in a domestic as well as international context will bring about a resolution of demographic problems. At the First National Seminar on Population Policy, the head of the National Planning Institute, Brigadier General Montoya, reported that the population of the country was growing at an exceptionally rapid rate. It was emphasized, however, that to act directly on demographic variables and attempt to reduce the birth rate, instead of insisting on structural change, would be merely to reverse the terms of the problem, obscure the causes and resolve only the effects. A process of economic and social restructuring, on the other hand, together with the creation of an environment that would enable families to exercise responsible parenthood would result in a rate of population growth that would be compatible with the country's development requirements.

The Government considers that one of the gravest national problems--and the greatest obstacle to national integration--is continuing in-migration to the coastal cities, a process that has accentuated regional disequilibria and resulted nation-wide in more than 800 squatter settlements, which constitute some 27 per cent of the total urban population and 30 per cent of the population of the metropolitan centre. In addition, it has had serious adverse effects on the health, education and housing sectors.

The Government has drawn up complex plans and programmes to deal with spatial distribution problems on both a theoretical and a substantive level. For example, the Government's national report to Habitat in 1976 outlined an urban-regional directive plan and a normative system of cities. A number of specific plans for selected planning regions as part of the policy of territorial adjustment were defined in the 1971-1975 development plan, and the subsequent plan for 1975-1978 contained a number of additional specific projects designed to reinforce the Government's regional policies. Whereas a number of regional plans are well under way, such as the project on migration and employment that is being implemented in Huancayo and will be evaluated at a national seminar in late 1977, many of the Government's regional and spatial plans remain

merely indicative, as a result of domestic financial constraints. However, the body of spatial policies outlined by the Government in its successive development plans and in various official statements remains in the forefront of government concern. Aside from the existence of financial constraints, part of the difficulty in implementation has resulted from the fact that the complexity of the country's spatial distribution problems has necessitated intervention in order to modify a wide array of socio-economic as well as demographic factors. At the First National Seminar on Population Policy, for example, one working group concluded that internal migration could be expected to continue, given the existence of extreme inequality between urban and rural areas, and proposed a series of interrelated measures to resolve the problem: the establishment of new rural development zones and intermediate urban centres, the provision of basic services to the rural population, the modification of internal pricing policies, the allocation of governmental revenues in a more equitable manner among regions etc.

In attempting to resolve the country's complex demographic problems, a national population policy will play an important role. At the First National Seminar on Population Policy, the head of the National Planning Institute noted that although true development--that is, development involving fundamental economic and social change--was necessary if demographic problems were to be resolved, it was also necessary to have an explicit population policy with specific goals, in order to guarantee free and responsible parenthood and achieve desired national demographic objectives. Basically, the Government's new policy will serve a twofold purpose--as an official guideline to ensure that population trends and structures will be taken into full account in the formulation of all sectoral plans, and as a kind of political platform that will be disseminated in the communication media and will attempt to forge something of a national consensus with respect to population matters.

Peru: Selected demographic indicators, 1950-2000

Medium variant	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000
Population, total (in 1000) ..	7915	8775	9993	11440	13248	15326	17711	20424	23478	26871	30561
-- , males (--) ..	3979	4408	5021	5751	6662	7707	8907	10277	11821	13538	15407
-- , females (--) ..	3936	4367	4972	5690	6586	7619	8804	10147	11657	13332	15154
Pop. ages 0-4 to total (0/0) ..	16.8	17.2	17.8	17.3	17.6	17.1	16.6	16.1	15.6	14.9	14.2
-- 5-14 --	24.6	25.8	26.4	27.1	26.9	27.0	27.0	26.5	26.0	25.4	24.8
-- 15-64 --	51.4	52.0	52.0	52.4	52.4	53.0	53.4	54.4	55.3	56.4	57.5
-- 65+ --	7.2	5.0	3.8	3.3	3.0	2.9	2.9	3.0	3.1	3.3	3.5
-- under 20 --	51.0	53.0	54.3	54.8	55.0	54.8	54.1	53.4	52.2	51.0	49.5
Women ages 15-49 to females (0/0)	43.7	44.7	44.8	45.3	45.4	45.9	46.3	47.2	48.0	48.8	49.6
Dependency ratios (per 1000)	944.7	924.2	924.2	909.2	907.2	886.3	871.0	838.4	807.1	774.5	738.1
Child-woman ratios (per 1000) ...	772.1	774.1	796.5	768.3	781.5	748.9	722.2	687.1	652.6	616.3	577.2
Sex ratios (per 100 females)	101.1	100.9	101.0	101.1	101.2	101.1	101.2	101.3	101.4	101.5	101.7
Median ages (years)	19.5	18.5	17.9	17.7	17.6	17.8	18.0	18.4	19.0	19.5	20.3
Proportion of urban (0/0)	41.3	44.0	47.0	50.6	53.8	57.0	60.2	63.4	66.4	69.4	72.2
Population density (per sq.km.) .	6	7	8	9	10	12	14	16	18	21	24
	1950-1955	1955-1960	1960-1965	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000	
Rates of growth (0/0)	2.06	2.60	2.70	2.93	2.91	2.89	2.85	2.79	2.70	2.57	
Natural increase rates (0/00) ...	20.6	26.0	27.0	29.3	29.1	28.9	28.5	27.8	27.0	25.7	
Crude birth rates (--) ...	44.2	44.7	42.7	43.0	41.0	39.2	37.4	35.5	33.5	31.4	
Crude death rates (--) ...	23.6	18.7	15.7	13.7	11.9	10.3	8.9	7.7	6.6	5.7	
Gross production rates	--	--	--	--	2.83	2.67	2.50	2.33	2.17	2.00	
Net reproduction rates	--	--	--	--	2.30	2.23	2.16	2.07	1.97	1.86	
Total fertility rates (0/00)	--	--	--	--	5796	5451	5108	4763	4417	4073	
General fertility rates (--)	200.9	200.6	190.6	190.7	180.7	171.0	160.8	150.1	139.5	128.6	
Life expectancy, males (years) ..	43.3	47.1	49.6	51.8	53.9	56.3	59.0	61.5	64.1	66.5	
-- , females (--) ...	46.3	50.0	52.5	55.0	57.5	60.0	62.5	65.0	67.6	70.0	
-- , total (--) ...	44.8	48.5	51.0	53.4	55.7	58.1	60.7	63.2	65.8	68.2	

/...

High variant	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000
Population, total (in 1000) ..	7915	8775	9993	11440	13248	15408	17985	21038	24641	28887	33860
-- , males (--) ..	3979	4408	5021	5751	6662	7748	9046	10589	12412	14564	17086
-- , females (--) ..	3936	4367	4972	5690	6586	7660	8938	10450	12229	14323	16774
Pop., ages 0-4 to total (0/0) ..	16.8	17.2	17.8	17.3	17.6	17.5	17.4	17.3	17.1	16.9	16.6
-- 5-14 --	24.6	25.8	26.4	27.1	26.9	26.8	27.0	27.0	26.9	26.7	26.5
-- 15-64 --	51.4	52.0	52.0	52.4	52.4	52.7	52.6	52.8	53.0	53.3	53.7
-- 65+ --	7.2	5.0	3.8	3.3	3.0	2.9	2.9	2.9	3.0	3.1	3.1
-- under 20 --	51.0	53.0	54.3	54.8	55.0	55.1	54.8	54.8	54.5	54.1	53.6
Women ages 15-49 to females (0/0)	43.7	44.7	44.8	45.3	45.4	45.7	45.6	45.8	46.1	46.4	46.5
Dependency ratios (per 1000)	944.7	924.2	924.2	909.2	907.0	896.4	899.9	893.7	885.2	874.8	862.2
Child-woman ratios (per 1000) ...	772.1	774.1	796.5	768.3	781.5	772.3	769.8	759.2	746.8	734.1	721.2
Sex ratios (per 100 females)	101.1	100.9	101.0	101.1	101.2	101.2	101.2	101.3	101.5	101.7	101.9
Median ages (years)	19.5	18.5	17.9	17.7	17.6	17.6	17.7	17.7	17.9	18.0	18.3
Proportion of urban (0/0)	41.3	44.0	47.0	50.6	53.8	57.4	61.1	64.9	68.6	72.3	75.8
Population density (per sq.km.) .	6	7	8	9	10	12	14	16	19	22	26

	1950-1955	1955-1960	1960-1965	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000
Rates of growth (0/0)	2.06	2.60	2.70	2.93	3.02	3.09	3.14	3.16	3.18	3.18
Natural increase rates (0/00) ...	20.6	26.0	27.0	29.3	30.2	30.9	31.3	31.5	31.7	31.7
Crude birth rates (--) ...	44.2	44.7	42.7	43.0	42.2	41.3	40.4	39.3	38.3	37.3
Crude death rates (--) ...	23.6	18.7	15.7	13.7	12.0	10.5	9.1	7.8	6.6	5.6
Gross reproduction rates	--	--	--	--	2.92	2.83	2.75	2.67	2.58	2.50
Net reproduction rates	--	--	--	--	2.37	2.38	2.38	2.38	2.37	2.35
Total fertility rates (0/00)	--	--	--	--	59.72	5803	5634	5464	5294	5125
General fertility rates (--)	200.9	200.6	190.6	190.7	186.3	182.3	177.7	172.3	167.1	162.1
Life expectancy, males (years) ..	43.3	47.1	49.6	51.8	53.9	56.3	59.0	61.5	64.1	66.5
-- , females (--) ...	46.3	50.0	52.5	55.0	57.5	60.0	62.5	65.0	67.6	70.0
-- , total (--) ...	44.8	48.5	51.0	53.4	55.7	58.1	60.7	63.2	65.8	68.2

/...

Low variant	1950	1955	1960	1965	1970	1975	1980	1985	1990	1995	2000
Population, total (in 1000) ...	7915	8775	9993	11440	13248	15250	17455	19847	22387	24994	27539
-- , males (--) ...	3979	4408	5021	5751	6662	7668	8778	9984	11266	12584	13869
-- , females (--) ...	3936	4367	4972	5690	6586	7582	8678	9863	11120	12410	13670
Pop. ages 0-4 to total (0/0)	16.8	17.2	17.8	17.3	17.6	16.7	15.8	14.9	14.0	12.9	11.5
-- 5-14 --	24.6	25.8	26.4	27.1	26.9	27.1	27.0	26.0	25.0	24.0	22.8
-- 15-64 --	51.4	52.0	52.0	52.4	52.4	53.3	54.2	56.0	57.7	59.6	61.8
-- 65+ --	7.2	5.0	3.8	3.3	3.0	2.9	3.0	3.1	3.3	3.5	3.9
-- under 20 --	51.0	53.0	54.3	54.8	55.0	54.6	53.4	52.1	49.9	47.6	44.8
Women ages 15-49 to females (0/0)	43.7	44.7	44.8	45.3	45.4	46.2	47.0	48.6	50.0	51.5	52.9
Dependency ratios (per 1000)	944.7	924.2	924.2	909.2	907.0	876.9	844.0	786.5	732.8	678.1	618.1
Child-woman ratios (per 1000) ...	772.1	774.1	796.5	768.3	781.5	727.1	677.6	619.1	563.1	503.8	439.6
Sex ratios (per 100 females)	101.1	100.9	101.0	101.1	101.2	101.1	101.2	101.2	101.3	101.4	101.5
Median ages (years)	19.5	18.5	17.9	17.7	17.6	17.9	18.4	19.1	20.1	21.3	22.7
Proportion of urban (0/0)	41.3	44.0	47.0	50.6	53.8	56.7	59.3	61.8	64.1	66.3	68.3
Population density (per sq.km.)..	6	7	8	9	10	12	14	15	17	19	21
	1950-1955	1955-1960	1960-1965	1965-1970	1970-1975	1975-1980	1980-1985	1985-1990	1990-1995	1995-2000	
Rates of growth (0/0)	2.06	2.60	2.70	2.93	2.82	2.70	2.57	2.41	2.20	1.94	
Natural increase rates (0/00) ...	20.6	26.0	27.0	29.3	28.1	27.0	25.7	24.1	22.0	19.4	
Crude birth rates (--) ...	44.2	44.7	42.7	43.0	39.9	37.2	34.4	31.6	28.6	25.2	
Crude death rates (--) ...	23.6	18.7	15.7	13.7	11.8	10.2	8.8	7.6	6.6	5.8	
Gross reproduction rates	--	--	--	--	2.75	2.50	2.25	2.00	1.75	1.50	
Net reproduction rates	--	--	--	--	2.23	2.10	1.94	1.78	1.60	1.40	
Total fertility rates (0/00)	--	--	--	--	5628	5117	4604	4092	3580	3068	
General fertility rates (--)	200.9	200.6	190.6	190.7	175.4	160.4	144.9	129.1	113.4	97.1	
Life expectancy, males (years) ..	43.3	47.1	49.6	51.8	53.9	56.3	59.0	61.5	64.1	66.5	
-- , females (--) ...	46.3	50.0	52.5	55.0	57.5	60.0	62.5	65.0	67.6	70.0	
-- , total (--) ...	44.8	48.5	51.0	53.4	55.7	58.1	60.7	63.2	65.8	68.2	

Source: World Population Prospects as Assessed in 1973 (United Nations publication, Sales No. 76.XIII.4).

Litho in United Nations, New York
35246—March 1978—4,700